



# **STIC Search Report**

**EIC 2600**

**STIC Database Tracking Number: 163644**

**TO: Brian Werner**  
**Location: KNX 09 D39**  
**Art Unit : 2621**  
**Friday, August 26, 2005**

**Case Serial Number: 09/856422**

**From: Paul Obiniyi**  
**Location: EIC 2600**  
**KNX 08 B55**  
**Phone: 305-1836**

**paul.obiniyi@uspto.gov**

## **Search Notes**

Dear Examiner Werner,

Attached please find the results of your search. Please feel free to contact me if you have additional questions or would like a re-focus search. Thank you and have a great day.

Paul

111

# SEARCH REQUEST FORM

Access DB#

163644

Scientific and Technical Information Center

Requester's Full Name Brian Warner Examiner #: 73985 Date: 8/24/05  
Art Unit: 2621 Phone Number 272-7401 Serial Number: 09/856,422  
Location: KNX 9039 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the species or structures; keywords, synonyms, acronyms; and registry numbers; and combine with the concept or utility of the invention. Define terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, claims, and abstract.

Title of Invention: Computerized Adaptive Imaging

Inventors (please provide full names): See Attached BIB Sheet

Earliest Priority Filing Date:                     

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate sequence number.

- Determine an index of refraction distribution in a sample, and then ray-trace the sample.

See attached claim 34.

## STAFF USE ONLY

Searcher: Paul Obinny

Searcher Phone #: 27734

Searcher Location: KNX 08B55

Date Searcher Picked Up: 08/25/05

Date Completed: 08/26/05

Searcher Prep & Review Time: 75

Clerical Prep Time:                     

Online Time: 170

## Type of Search

Sequence (#)                     

AA Sequence (#)                     

Structure (#)                     

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Litigation                     

Fulltext                     

Patent Family                     

Other                     

## Vendors and cost where applicable

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Sequence Systems                     

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Other (specify) PD, DTIC, IEEE, NISPE

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**AMERICAN INSTITUTE OF PHYSICS****USPTO Full Text Retrieval Options**☒ document 4 of 4 [Order Document](#)**INSPEC - 1969 to date (INZZ)****Accession number & update**

5720034, B9711-4250-017; 971014.

**Title**

Two-dimensional model of photon recycling in direct gap semiconductor devices.

**Author(s)**[Parks-J-W-Jr](#); [Brennan-K-F](#); [Smith-A-W](#).**Author affiliation**

Sch of Electr &amp; Comput Eng, Georgia Inst of Technol, Atlanta, GA, USA.

**Source**

Journal-of-Applied-Physics (USA), vol.82, no.7, p.3493-8, 1 Oct. 1997. , Published: AIP.

**CODEN**

JAPIAU.

**ISSN**

ISSN: 0021-8979, CCCC: 0021-8979/97/82(7)/3493/6/ (\$10.00).

**Availability**

SICI: 0021-8979(19971001)82:7L.3493:DMPR; 1-9

Electronic Journal Document Number: S0021-8979(97)02719-9.

**Publication year**

1997.

**Language**

EN.

**Publication type**

J Journal Paper.

**Treatment codes**

P Practical; T Theoretical or Mathematical.

**Abstract**

The effects of photon recycling are examined in a general, fully numerical, two-dimensional model accounting for the detailed geometry of the device and the spectral content of the recombined excess carriers. The primary component of this model is a three-dimensional **ray** tracing algorithm which encompasses effects such as wavelength dependent absorption and **index** of refraction, the angular dependence of transmissivity between layers in a heterostructure device, and multiple reflections within a device. This **ray** tracing preprocessing step is used to map all of the possible trajectories and absorption of various wavelengths of emitted light from each originating node within the device. These data are integrated into a macroscopic device simulator to determine the spatial and temporal location

of the reabsorbed radiation within the geometry of the device. By incorporating the **ray tracer** results with the total quantity and spectral content of recombined carriers at each node within the simulation, the recycled generation rate can be obtained. To demonstrate the use of this model, the effects of photon recycling on the carrier lifetime in an InP/InGaAs double heterostructure photodiode are presented. Good agreement between the experimentally measured lifetime and that predicted using photon recycling is obtained. (20 refs).

**Descriptors**

carrier-lifetime; gallium-arsenide; III-V-semiconductors; indium-compounds; light-transmission; photodiodes; refractive-index; semiconductor-device-models; surface-recombination.

**Keywords**

direct gap semiconductor devices; photon recycling; recombined excess carriers; wavelength dependent absorption; refraction **index**; angular dependence; transmissivity; carrier lifetime; InP InGaAs; double heterostructure photodiode; InP InGaAs.

**Classification codes**

B4250 (Photoelectric devices).

B2560B (Semiconductor device modelling and equivalent circuits).

**Chemical indexing**

InP-InGaAs int, InGaAs int, InP int, As int, Ga int, In int, P int, In GaAs ss, As ss, Ga ss, In ss, InP bin, In bin, P bin.

**Copyright statement**

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☒ **document 2 of 4** Order Document**INSPEC - 1969 to date (INZZ)****Accession number & update**

6496696, A2000-06-0760P-007; 20000201.

**Title**

Computational model of DIC microscopy for reconstructing 3-D specimens: from observations to measurements.

**Author(s)**Kagalwala-F; Kanade-T; Lanni-F.**Author affiliation**

Robotics Inst, Carnegie Mellon Univ, Pittsburgh, PA, USA.

**Source**

Technical Digest. Summaries of papers presented at the Conference on Lasers and Electro-Optics. Postconference Edition. CLEO '99. Conference on Lasers and Electro-Optics, Baltimore, MD, USA, 23-28 May 1999.  
Sponsors: IEEE/Lasers & Electro-Opt. Soc., OSA-Opt. Soc. America, Quantum Electron. Div. Eur. Phys. & Opt. Soc., Japanese Quantum Electron. Joint Group.  
In: p.80-1, 1999.

**ISSN**

ISBN: 1-55752-595-1.

**Publication year**

1999.

**Language**

EN.

**Publication type**

CPP Conference Paper.

**Treatment codes**

T Theoretical or Mathematical; X Experimental.

**Abstract**

Summary form only given. Differential interference contrast (DIC) microscopy, a method pioneered by Georges Nomarski, is widely used to study live biological specimens. However, to date, biologists only qualitatively interpret DIC microscope images. In this work, we describe a method to extract quantitative information from optically-sectioned DIC microscope images. Specifically, given a set of images of a specimen, we attempt to reconstruct the three-dimension structure and **refractive index** distribution throughout the specimen. (0 refs).

**Descriptors**

aberrations; biological-techniques; image-reconstruction; light-interference; optical-images; optical-microscopy; ray-tracing;

refractive-index.

**Keywords**

differential interference contrast microscopy; Nomarski microscopy; computational model; live biological specimen; 3D structure reconstruction; quantitative information; optically sectioned microscope images; **refractive index** distribution; generalised **ray tracer**; interference image; prism parameters; aberrations; iterative nonlinear optimisation.

**Classification codes**

A0760P (Optical microscopy).  
A8780 (Biophysical instrumentation and techniques).  
A4230V (Image processing and restoration).  
A4215D (Optical wave fronts and **ray** tracing).  
A4230F (Aberrations in optical images).  
A4225H (Optical interference and speckle).

**Copyright statement**

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05777674 SUPPLIER NUMBER: 74802441

**Computational adaptive optics for live three-dimensional biological imaging.**

Kam, Z. ; Hanser, B.; Gustafsson, M. G. L.; Agard, D. A.; Sedat, J. W  
Proceedings of the National Academy of Sciences of the United States, 98, 7  
, 3790

March 27, 2001

ISSN: 0027-8424

LANGUAGE: English

RECORD TYPE: Abstract

Kam, Z ...

...AUTHOR ABSTRACT: microscopy of thick biological samples, such as tissues, is often limited by aberrations caused by **refractive index** variations within the sample itself. This problem is particularly severe for live imaging, a field...

...inherently fluorescent proteins. We describe a method of removing such aberrations computationally by mapping the **refractive index** of the sample using differential interference contrast microscopy, modeling the aberrations by ray tracing through...

11/3,K/2 (Item 1 from file: 98)  
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04656753 H.W. WILSON RECORD NUMBER: BGSA01156753

**Computational adaptive optics for live three-dimensional biological imaging.**

Kam, Z

Hanser, B; Gustafsson, M. G. L

Proceedings of the National Academy of Sciences of the United States of America v. 98 no7 (Mar. 27 2001) p. 3790-5

SPECIAL FEATURES: bibl f graph il ISSN: 0027-8424

LANGUAGE: English

COUNTRY OF PUBLICATION: United States

Kam, Z

ABSTRACT: A computational method for removing aberrations caused by **refractive index** variations during light microscopy of thick biological samples was developed. The aberrations are removed by mapping the **refractive index** of the sample by means of differential interface contrast microscopy, modeling the aberrations by ray...

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05052867 SUPPLIER NUMBER: 73021914

**Computational adaptive optics for live three-dimensional biological imaging**

Kam, Z ; Hanser, B; Gustafsson, M G L; Agard, D A; Sedat, J W

Proceedings of the National Academy of Sciences of the United States of

America (IPNA), v98 n7, p3790-3795

Mar 27, 2001

ISSN: 0027-8424 JOURNAL CODE: IPNA

DOCUMENT TYPE: Feature

LANGUAGE: English RECORD TYPE: Abstract

**Kam, Z ...**

...ABSTRACT: microscopy of thick biological samples, such as tissues, is often limited by aberrations caused by **refractive index** variations within the sample itself. This problem is particularly severe for live imaging, a field...

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03122594 (USE FORMAT 7 OR 9 FOR FULLTEXT)

**Nature**

Heinhorst, Sabine; Cannon, Gordon

Journal of Chemical Education (ICHE), v74 n1, p13-14, p.2

Jan 1997

ISSN: 0021-9584 JOURNAL CODE: ICHE

DOCUMENT TYPE: Feature

LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 849

**TEXT:**

... interest, GFP' has found widespread' application' an a "natural" fluorescent marker that allows researchers to **track** ' the expression of these protein chimeras and probe their' interactions with other proteins by **fluorescent** ' **microscopy** .' Other potential uses of GFP include studies of protein' folding kinetics and modification of the...

...a polymer with' photorefractive properties.' Such materials are' able to undergo light-induced' changes in **refractive** ' **index** and' therefore provide a' nonlinear medium in' which information can' be stored as a function...

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01744859 DOCUMENT TYPE: Product

**PRODUCT NAME: ZEMAX SE, XE, & EE (744859)**

ZEMAX Development Corp (590631)  
4901 Morena Blvd #207  
San Diego, CA 92117-7320 United States  
TELEPHONE: (858) 490-2840

RECORD TYPE: Directory

CONTACT: Sales Department

REVISION DATE: 20031208

...program that allows designers to conceptualize, optimize, analyze, and document optical systems. ZEMAX performs sequential **ray - tracing** and models surface properties in detail. Surfaces can be reflective, refractive, or diffractive. ZEMAX lets users define shape, **refraction**, reflection, **index**, gradient **index**, thermal, polarization, and other surface properties. Supported surfaces include ABCD (black box), Fresnel, cubic spline, odd aspheric, hologram, and paraxial lens. For non-sequential **ray - tracing**, ZEMAX employs 3D models of optical components, **tracing rays** through any solid shape. ZEMAX supports sequential, supports astigmatic and elliptical diode-type sequential sources...

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00124926 DOCUMENT TYPE: Review

**PRODUCT NAMES: XML (837709); Bowstreet Factory (799734); XMetaL (727644); Market Agility (013838); Expressroom I/O (784591)**

**TITLE: Even-handed XML brings commonality to diverse applications**

AUTHOR: Lamont, Judith

SOURCE: KM World, v9 n5 p10(3) Jun 2000

ISSN: 1060-894X

HOME PAGE: <http://www.KMworld.com>

RECORD TYPE: Review

REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

REVISION DATE: 20040530

...document and deploy them on a Web page. Sequoia Software provides an XML server and **indexer** that **distributes** content through a portal. One user is PSINet, which develops and **tracks** leads using XML technology. XABizTools from XAware.com can also cull information from multiple sources

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13/3,K/1

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02730971

DOCUMENT TYPE: Company

**Scimagix Inc (730971)**

2855 Campus Dr #100

San Mateo, CA 94403-2510 United States

TELEPHONE: (650) 377-2300

FAX: (650) 377-2499

HOMEPAGE: <http://www.scimagix.com>

EMAIL: [info@scimagix.com](mailto:info@scimagix.com)

RECORD TYPE: Directory

CONTACT: Sales Department

ORGANIZATION TYPE: Corporation

STATUS: Active

SALES: NA

PERSONNEL: Dunkle, Robert, Chief Executive Officer; Dunkle, Robert,  
President; Moore, Jeff, VP Engineering; Meyers, Mark, VP Sales; Smith,  
Janet L, PhD, VP

REVISION DATE: 20030228

Scimagix Incorporated offers software and services that help drug discovery  
researchers organize, **index** , **distribute** , and mine the **information** in  
**images** .

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01744859 DOCUMENT TYPE: Product

PRODUCT NAME: ZEMAX SE, XE, & EE (744859)

ZEMAX Development Corp (590631)  
4901 Morena Blvd #207  
San Diego, CA 92117-7320 United States  
TELEPHONE: (858) 490-2840

RECORD TYPE: Directory

CONTACT: Sales Department

REVISION DATE: 20031208

...properties in detail. Surfaces can be reflective, refractive, or diffractive. ZEMAX lets users define shape, **refraction**, reflection, **index**, gradient **index**, thermal, polarization, and other surface properties. Supported surfaces include ABCD (black box), Fresnel, cubic spline, odd aspheric, hologram, and paraxial lens. For non-sequential ray-tracing, ZEMAX employs **3D** models of optical components, tracing rays through any solid shape. ZEMAX supports sequential, supports astigmatic...

14/3,K/2

DIALOG(R)File 256:TecInfoSource  
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01195367 DOCUMENT TYPE: Product

PRODUCT NAME: 3D Constructor (195367)

Media Cybernetics LP (366013)  
8484 Georgia Ave #200  
Silver Spring, MD 20910-5611 United States  
TELEPHONE: (301) 495-3305

RECORD TYPE: Directory

CONTACT: Sales Department

REVISION DATE: 20040318

Media Cybernetics' **3D** Constructor (R) is an Image-Pro (R) Plus plug-in that provides users with **3D** reconstruction, visualization, and measurement features. The system reads AutoQuant, Bio-Rad confocal, and other file types. It has automated and manual measurement options. **3D** Constructor includes image capture and 2D processing and analysis features. The system provides scientific researchers...  
...wireframe rendering, orthogonal and oblique slicing, and other tools. It automatically reads wavelength, magnification, immersion **refractive index**, and other image parameters. Image stacks can be explored with zoom, rotation, and panning tools. The system also includes lighting controls.

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S15	3	S14 NOT PY>1998
S16	38	S1 AND S4 AND S9
S17	33	RD (unique items)
S18	11	S17 NOT PY>1998
S19	10	S18 NOT (S12 OR S15)
S20	21	S3 AND S4
S21	14	RD (unique items)
S22	9	S21 NOT PY>1998
S23	9	S22 NOT (S19 OR S12 OR S15)
S24	2	S3 AND S5



S25	2	RD (unique items)
S26	1	S25 NOT PY>1998
S27	1	S26 NOT (S23 OR S19 OR S12 OR S15)
S28	1	S3 AND S6
S29	1	S28 NOT (S27 OR S23 OR S19 OR S12 OR S15)
S30	0	S3 AND S8
S31	15	S3 AND S9
S32	9	RD (unique items)
S33	6	S32 NOT PY>1998
S34	6	S33 NOT (S29 OR S27 OR S23 OR S19 OR S12 OR S15)

12/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

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6162813 INSPEC Abstract Number: A1999-06-8780-008, B1999-03-7510J-032,  
C1999-03-7330-397

**Title: Microscopic differential interference contrast image processing by  
line integration (LID) and deconvolution**

Author(s): Kam, Z.

Author Affiliation: Dept. of Molecular Cell Biol., Weizmann Inst. of  
Sci., Rehovot, Israel

Journal: Bioimaging vol.6, no.4 p.166-76

Publisher: IOP Publishing,

Publication Date: Dec. 1998 Country of Publication: UK

CODEN: BOIMEL ISSN: 0966-9051

SICI: 0966-9051(199812)6:4L.166:MDIC;1-3

Material Identity Number: B212-1999-001

U.S. Copyright Clearance Center Code: 0966-9051/98/040166+11\$19.50

Language: English

Subfile: A B C

Copyright 1999, IEE

Author(s): Kam, Z.

...Abstract: by DIC, namely path integration (line integrated DIC, or  
LID). LID images relate to the **refractive index** of the specimen, and  
are inherently positive in value, thus many powerful algorithms developed  
for...

...Identifiers: specimen **refractive index** ;

12/3,K/2 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2005 Inst for Sci Info. All rts. reserv.

09549092 Genuine Article#: 417KG No. References: 47

**Title: Computational adaptive optics for live three-dimensional biological  
imaging**

Author(s): Kam Z ; Hanser B; Gustafsson MGL; Agard DA; Sedat JW (REPRINT)

Corporate Source: Univ Calif San Francisco,Dept Biochem & Biophys,San  
Francisco//CA/94143 (REPRINT); Univ Calif San Francisco,Dept Biochem &  
Biophys,San Francisco//CA/94143; Univ Calif San Francisco,Grad Grp  
Biophys,San Francisco//CA/94143; Weizmann Inst Sci,Dept Mol Cell  
Biol,IL-76100 Rehovot//Israel/

Journal: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED  
STATES OF AMERICA, 2001, V98, N7 (MAR 27), P3790-3795

ISSN: 0027-8424 Publication date: 20010327

Publisher: NATL ACAD SCIENCES, 2101 CONSTITUTION AVE NW, WASHINGTON, DC  
20418 USA

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

Author(s): Kam Z ; Hanser B; Gustafsson MGL; Agard DA; Sedat JW (REPRINT)

...Abstract: microscopy of thick biological samples, such as tissues, is  
often limited by aberrations caused by **refractive index** variations  
within the sample itself. This problem is particularly severe for live  
imaging, a field...

...inherently fluorescent proteins. We describe a method of removing such aberrations computationally by mapping the **refractive index** of the sample using differential interference contrast microscopy, modeling the aberrations by ray tracing through...

...Identifiers--CONFOCAL FLUORESCENCE MICROSCOPY; SINGLE MOLECULES;  
**REFRACTIVE - INDEX** ; DIC MICROSCOPY; POINT-SPREAD; ABERRATION; LIGHT;  
RESTORATION; RECONSTRUCTION; DECONVOLUTION

?

15/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2005 Institution of Electrical Engineers. All rts. reserv.

6162813 INSPEC Abstract Number: A1999-06-8780-008, B1999-03-7510J-032, C1999-03-7330-397

**Title: Microscopic differential interference contrast image processing by line integration (LID) and deconvolution**

Author(s): Kam, Z.

Author Affiliation: Dept. of Molecular Cell Biol., Weizmann Inst. of Sci., Rehovot, Israel

Journal: Bioimaging vol.6, no.4 p.166-76

Publisher: IOP Publishing,

Publication Date: Dec. 1998 Country of Publication: UK

CODEN: BOIMEL ISSN: 0966-9051

SICI: 0966-9051(199812)6:4L.166:MDIC;1-3

Material Identity Number: B212-1999-001

U.S. Copyright Clearance Center Code: 0966-9051/98/040166+11\$19.50

Language: English

Subfile: A B C

Copyright 1999, IEE

**Title: Microscopic differential interference contrast image processing by line integration (LID) and deconvolution**

**Abstract: Differential interference contrast ( DIC )** microscopy is the preferred imaging mode for studying live unstained cells and embryos, This is mainly attributed to the optical sectioning capability which makes **DIC** suitable for three-dimensional microscopy. However, **DIC** images are not convenient for standard computerized image interpretation. The authors present here a processing algorithm that converts **DIC** images into a form which is much more amenable for such analysis. The algorithm is based on computational inversion of the directional gradient performed optically by **DIC** , namely path integration (line integrated **DIC** , or LID). LID images relate to the **refractive index** of the specimen, and are inherently positive in value, thus many powerful algorithms developed for fluorescent images can be applied to them. The method is demonstrated here for identifying and **tracking** nuclei in developing zebrafish embryos, and for reconstructing the shape of live leukocytes.

Identifiers: microscopic **differential interference contrast** image processing...

...specimen **refractive index** ; ...

...cell nuclei **tracking**

15/3,K/2 (Item 1 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

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06144110 E.I. No: EIP02397105731

**Title: Traction forces and subcellular structure imaged in contracting and locomoting cells**

Author: Burton, Kevin

Corporate Source: Center for LMIB Carnegie Mellon University, Pittsburgh, PA 15213, United States

Conference Title: Optical Investigations of Cells In Vitro and In Vivo

Conference Location: San Jose, CA, United States Conference Date:  
19980125-19980128

E.I. Conference No.: 59711

Source: Proceedings of SPIE - The International Society for Optical  
Engineering v 3260 1998. p 63-70

Publication Year: 1998

CODEN: PSISDG ISSN: 0277-786X

Language: English

**Title: Traction forces and subcellular structure imaged in contracting  
and locomoting cells**

...Abstract: approached by imaging cellular and cytoskeletal dynamics in  
living cells along with strain produced by **traction** forces in transparent  
silicone rubber substrata. The silicone has an **index** of **refraction**  
very similar to glass, facilitating many types of optical microscopy.  
Fluorescence microscopy was used to...

...contacts were studied by interference contrast microscopy (IRM), and  
cell morphology was monitored by Nomarski **Differential Interference**  
**Contrast (DIC)**. Changes in **traction** force at cell-substratum contacts  
correlated strongly with assembly of myosin into the cytoskeleton. An...

Descriptors: \*Optical engineering; Cells; Biomechanics; Medical imaging;  
Silicon; **Refractive index**; Surface properties; Ultraviolet radiation;  
Fluorescence; Optical microscopy

15/3,K/3 (Item 2 from file: 8)

DIALOG(R)File 8: Ei Compendex(R)

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06138330 E.I. No: EIP02397098792

**Title: Computational model of image formation process in DIC microscopy**

Author: Kagalwala, Farhana; Kanade, Takeo

Corporate Source: Carnegie Mellon University, Pittsburgh, PA, United  
States

Conference Title: Proceedings of Three-Dimensional and Multidimensional  
Microscopy: Image Acquisition and Processing V

Conference Location: San Jose, CA, United States Conference Date:  
19980127-19980129

E.I. Conference No.: 59662

Source: Proceedings of SPIE - The International Society for Optical  
Engineering v 3261 1998. p 193-204

Publication Year: 1998

CODEN: PSISDG ISSN: 0277-786X

Language: English

**Title: Computational model of image formation process in DIC microscopy**

Abstract: A computational model for the image formation process was  
developed for the Nomarski **differential interference contrast (DIC)**  
) microscope. The resultant model uses polarization **ray - tracing**  
techniques. The model was evaluated by comparing simulated images to the  
images taken under a real **DIC** microscope. (Edited abstract) 8 Refs.

...Descriptors: Mathematical models; Light transmission; Birefringence;  
Light polarization; X ray analysis; Electromagnetic wave propagation;  
Coherent light; **Refractive index**; Computer simulation; Image quality

Identifiers: Normarski **differential interference contrast**;  
Interference pattern; X **ray tracing**

?

19/3,K/1 (Item 1 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2005 Institution of Electrical Engineers. All rts. reserv.

5234943 INSPEC Abstract Number: A9610-0760P-004

**Title: Aberration control in quantitative imaging of botanical specimens by multidimensional fluorescence microscopy**

Author(s): White, N.S.; Errington, R.J.; Fricker, M.D.; Wood, J.L.

Author Affiliation: Dept. of Plant Sci., Oxford Univ., UK

Journal: Journal of Microscopy vol.181, pt.2 p.99-116

Publisher: Blackwell Science for R. Microsc. Soc,

Publication Date: Feb. 1996 Country of Publication: UK

CODEN: JMICAR ISSN: 0022-2720

SICI: 0022-2720(199602)181:2L.99:ACQI;1-8

Material Identity Number: J224-96003

U.S. Copyright Clearance Center Code: 0022-2720/96/\$11.50

Language: English

Subfile: A

Copyright 1996, IEE

**Title: Aberration control in quantitative imaging of botanical specimens by multidimensional fluorescence microscopy**

Abstract: Three dimensional (3-D) **fluorescence microscopes**, including conventional instruments with digital deblurring, confocal systems and two-photon excitation, all exhibit monochromatic...

... be considered as an optical component of the integrated imaging system.

Axial focus distortion, from **refractive index** boundaries at the sample,

can be accurately modelled by a geometric **ray tracing** programme,

considering weighted components across the entire objective lens working

NA. The modal z-focus...

...Identifiers: multidimensional **fluorescence microscopy** ; ...

...three dimensional **fluorescence microscopes** ; ...

... **refractive index** boundaries...

...geometric **ray tracing** programme

19/3,K/2 (Item 1 from file: 8)

DIALOG(R) File 8: Ei Compendex(R)

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04366331 E.I. No: EIP95102884523

**Title: Simulation of contaminant flow in a laboratory-scale porous system**

Author: Rashidi, Mehdi

Corporate Source: Lawrence Livermore Natl. Lab., Livermore, CA, USA

Conference Title: Environmental Monitoring and Hazardous Waste Site Remediation

Conference Location: Munich, Ger Conference Date: 19950619

E.I. Conference No.: 22370

Source: Proceedings of SPIE - The International Society for Optical Engineering v 2504 1995. Society of Photo-Optical Instrumentation Engineers, Bellingham, WA, USA. p 492-500

Publication Year: 1995

CODEN: PSISDG ISSN: 0277-786X ISBN: 0-8194-1862-5

Language: English

...Abstract: developed in our laboratories. The system studied consists of a packed porous column with a **refractive index** -matched fluid seeded with fluorescent **tracer** particles (for flow measurements) or an organic dye (for contaminant concentration measurements). Microscopic measurements of...

Descriptors: \*Contaminants; Porous materials; Simulation; Environmental protection; **Fluorescence** ; Transport properties; Imaging techniques; **Microscopic** examination

19/3,K/3 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2005 Inst for Sci Info. All rts. reserv.

07361367 Genuine Article#: 155VR No. References: 28

**Title: Microscopic differential interference contrast image processing by line integration (LID) and deconvolution**

Author(s): Kam Z (REPRINT)

Corporate Source: WEIZMANN INST SCI,DEPT MOL CELL BIOL/IL-76100

REHOVOT//ISRAEL/ (REPRINT)

Journal: BIOIMAGING, 1998, V6, N4 (DEC), P166-176

ISSN: 0966-9051 Publication date: 19981200

Publisher: IOP PUBLISHING LTD, DIRAC HOUSE, TEMPLE BACK, BRISTOL BS1 6BE, ENGLAND

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

...Abstract: by DIG, namely path integration (line integrated DIC, or LID). LID images relate to the **refractive index** of the specimen, and are inherently positive in value, thus many powerful algorithms developed for fluorescent images can be applied to them. The method is demonstrated here for identifying and **tracking** nuclei in developing zebrafish embryos, and for reconstructing the shape of live leukocytes.

...Identifiers--3-DIMENSIONAL **FLUORESCENCE MICROSCOPY** ; DIC **MICROSCOPY** ; MOTILITY; **LIGHT**; **TRACKING**; CELLS; SHAPE

19/3,K/4 (Item 2 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2005 Inst for Sci Info. All rts. reserv.

06115051 Genuine Article#: XW091 No. References: 37

**Title: Plasma membrane water permeability of cultured cells and epithelia measured by light microscopy with spatial filtering**

Author(s): Farinas J (REPRINT) ; Kneen M; Moore M; Verkman AS

Corporate Source: UNIV CALIF SAN FRANCISCO,CARDIOVASC RES INST, DEPT MED, 1246 HLTH SCI E TOWER/SAN FRANCISCO//CA/94143 (REPRINT); UNIV CALIF SAN FRANCISCO,CARDIOVASC RES INST, DEPT PHYSIOL/SAN FRANCISCO//CA/94143; UNIV CALIF SAN FRANCISCO,GRAD GRP BIOPHYS/SAN FRANCISCO//CA/94143

Journal: JOURNAL OF GENERAL PHYSIOLOGY, 1997, V110, N3 (SEP), P283-296

ISSN: 0022-1295 Publication date: 19970900

Publisher: ROCKEFELLER UNIV PRESS, 1114 FIRST AVE, 4TH FL, NEW YORK, NY 10021

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

...Abstract: molecular water channels. It was found that the integrated intensity of monochromatic light in a **phase** contrast or dark field **microscope** was dependent on relative cell volume. For cells of different size and shape (Sf9, MDCK, CHO, A549, **tracheal** epithelia,

BHK), increased cell volume was associated with decreased signal intensity; generally the signal decreased...  
...were confirmed by signal measurements of cell layers bathed in solutions of various osmolarities and **refractive indices**. The excellent signal-to-noise ratio of the transmitted light detection permitted measurement of cell...

...0.0024 cm/s (MDCK cells), and 0.0039 and 0.0052 cm/s (human **tracheal** cells) at 23 degrees C. In intact toad urinary bladder, basolateral P-f was 0...

19/3,K/5 (Item 3 from file: 34)  
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2005 Inst for Sci Info. All rts. reserv.

05889409 Genuine Article#: XE661 No. References: 104  
**Title: Automated image analysis technologies for biological 3D light microscopy**  
Author(s): Turner JN (REPRINT) ; Ancin H; Becker DE; Szarowski DH; Holmes M ; OConnor N; Wang M; Holmes T; Roysam B  
Corporate Source: NEW YORK STATE DEPT HLTH,WADSWORTH CTR LABS & RES, BOX 509, EMPIRE STATE PLAZA/ALBANY//NY/12201 (REPRINT); RENSSELAER POLYTECH INST,DEPT ELECT COMP & SYST ENGN/TROY//NY/12180; RENSSELAER POLYTECH INST,DEPT BIOMED ENGN/TROY//NY/12180; AUTOQUANT IMAGING INC,/TROY//NY/12180  
Journal: INTERNATIONAL JOURNAL OF IMAGING SYSTEMS AND TECHNOLOGY, 1997, V8 , N3, P240-254  
ISSN: 0899-9457 Publication date: 19970000  
Publisher: JOHN WILEY & SONS INC, 605 THIRD AVE, NEW YORK, NY 10158-0012  
Language: English Document Type: REVIEW (ABSTRACT AVAILABLE)

...Abstract: analysis based on adaptive segmentation, the results of which can be used to quantify and **trace** individual structures, and to montage high-resolution fields as well as the results of image...

...challenges in this area and our progress to date including automated segmentation, cell counting, neuron **tracing**, mosaic synthesis, 'blind' deconvolution of large 3D images, and high-speed computation are presented. (C...

...Identifiers--CONFOCAL **FLUORESCENCE MICROSCOPY** ;  
MAXIMUM-LIKELIHOOD-ESTIMATION; SCANNING LASER **MICROSCOPE** ; THINNING ALGORITHM SPTA; 3-DIMENSIONAL RECONSTRUCTION; HIPPOCAMPAL-NEURONS; BLIND DECONVOLUTION; **REFRACTIVE - INDEX** ; PRIMARY CULTURES; THICK  
Research Fronts: 95-1963 002 (FRACTIONAL FOURIER-TRANSFORM; 2-PHOTON CONFOCAL **FLUORESCENCE MICROSCOPY** ; OPTICAL IMPLEMENTATION; QUANTUM STATE; OPERATIONAL **PHASE** -SPACE MEASUREMENT)  
95-0873 001 (SYMBOLIC OBJECTS; DESIGN OF NEURAL NETWORKS; KNOWLEDGE-BASED SYSTEMS)  
95...

19/3,K/6 (Item 4 from file: 34)  
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2005 Inst for Sci Info. All rts. reserv.

02063581 Genuine Article#: JY243 No. References: 26  
**Title: ADSORPTION OF COMPLEX PROTEINS AT INTERFACES**



Author(s): ANDRADE JD; HLADY V; WEI AP  
Corporate Source: UNIV UTAH,DEPT BIOENGN,2480 MEB/SALT LAKE CITY//UT/84112  
Journal: PURE AND APPLIED CHEMISTRY, 1992, V64, N11 (NOV), P1777-1781  
ISSN: 0033-4545  
Language: ENGLISH Document Type: ARTICLE (Abstract Available)

...Abstract: allow one to evaluate and compare adsorption data, including kinetics and isotherms, adsorbed layer thickness, **refractive index**, multilayer formation, etc. We feel strongly that each different protein is a unique molecular personality...

Research Fronts: 90-0957 001 (PROTEIN ADSORPTION; TOTAL INTERNAL-REFLECTION **FLUORESCENCE MICROSCOPY**; SOLID LIQUID INTERFACE; MODEL MEMBRANES; ORIENTATION OF ADSORBED CYTOCHROME-C)  
90-1255 001 (PLASMA TRYPTOPHAN LEVELS; PROTEIN SELECTION; HEREDITARY TYROSINEMIA; PORPHYRIN METABOLISM; SERUM **TRACE** -ELEMENTS; NEUROLOGIC DISEASES)

19/3,K/7 (Item 5 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2005 Inst for Sci Info. All rts. reserv.

01558901 Genuine Article#: HH599 No. References: 14

Title: **ENHANCING THE LASER SCANNING CONFOCAL MICROSCOPIC VISUALIZATION OF LUCIFER YELLOW FILLED CELLS IN WHOLE-MOUNTED TISSUE**

Author(s): BECKER DL; DEKKERS J; NAVARRETE R; GREEN CR; COOK JE  
Corporate Source: UNIV LONDON UNIV COLL,DEPT ANAT & CELL BIOL,GOWER ST/LONDON WC1E 6BT//ENGLAND/

Journal: SCANNING MICROSCOPY, 1991, V5, N3 (SEP), P619-624

Language: ENGLISH Document Type: ARTICLE (Abstract Available)

...Abstract: neurons in methyl salicylate and mounting them in Entellan, a non-aqueous medium of high **refractive index**, enhances their visualization on a Bio-Rad LSCM with standard fluorescein (FITC) filters to an...

...Identifiers--ELECTRON- **MICROSCOPY**; SPINAL-CORD; **TRACER**; **FLUORESCENCE**; MOTONEURONS; INVITRO

19/3,K/8 (Item 6 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2005 Inst for Sci Info. All rts. reserv.

01190310 Genuine Article#: GD082 No. References: 22

Title: **ANALYSIS OF EDGE BIREFRINGENCE - DEDICATED TO INOUE,SHINYA**

Author(s): OLDENBOURG R

Corporate Source: MARINE BIOL LAB/WOODS HOLE//MA/02543; BRANDEIS UNIV,MARTIN FISHER SCH PHYS/WALTHAM//MA/02254

Journal: BIOPHYSICAL JOURNAL, 1991, V60, N3, P629-641

Language: ENGLISH Document Type: ARTICLE (Abstract Available)

...Abstract: As test objects, thin flakes of isotropic KCl crystals were immersed in media of various **refractive indices**. The measured retardation near crystal edges increased linearly with both the crystal thickness (tested between 0.3 and 1- $\mu$ m), and the difference in **refractive indices**  $n$  between crystal ( $n = 1.49$ ) and immersion liquids ( $n$  between 1.36 and 1.62). The specific edge birefringence, i.e., the retardation per thickness and per **refractive index**

difference, is 0.029 on the high **refractive index** side of the boundary and -0.015 on the low **refractive index** side. The transition through zero birefringence specifies the position of a boundary at a much...

...than predicted by the diffraction limit of the optical setup. The theoretical study employs a **ray tracing** procedure modeling the change in phase and polarization of rays passing through the specimen. We...

Research Fronts: 89-0305 001 (CONFOCAL **FLUORESCENCE MICROSCOPY** ;  
3-DIMENSIONAL OPTICAL TRANSFER-FUNCTION; BIOLOGICAL IMAGING)

19/3,K/9 (Item 1 from file: 35)  
DIALOG(R)File 35:Dissertation Abs Online  
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01598170 ORDER NO: AAD97-38360  
**OPTICAL METHODS FOR MEASURING PLASMA MEMBRANE OSMOTIC WATER PERMEABILITY IN CELL LAYERS (PHASE CONTRAST, TOTAL INTERNAL REFLECTION)**

Author: FARINAS, JAVIER ANIBAL

Degree: PH.D.


Year: 1997

Corporate Source/Institution: UNIVERSITY OF CALIFORNIA, SAN FRANCISCO (0034)

Source: VOLUME 58/07-B OF DISSERTATION ABSTRACTS INTERNATIONAL.  
PAGE 3510. 95 PAGES

...spatial filtering microscopy method was developed based on changes in transmitted light intensity in a **phase contrast microscope** occurring after volume changes induced by osmotic gradients. A theory based on the **refractive index** changes observed in cells by interferometry was developed to explain the dependence of transmitted light...

...cell volume. The method was applied to measure water permeability in epithelial cells from human **trachea** and to study the vasopressin response in intact toad bladder. Together, these methods will allow...



19/3,K/10 (Item 1 from file: 144)  
DIALOG(R)File 144:Pascal  
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13740689 PASCAL No.: 98-0433238

**Computational model of image formation process in DIC microscopy**

**Three-dimensional and multidimensional microscopy : image acquisition and processing V : San Jose CA, 27-29 January 1998**

KAGALWALA F; KANADE T

COGSWELL Carol J, ed; CONCHELLO Jose-Angel, ed; LERNER Jeremy M, ed; LU Thomas, ed; WILSON Tony, ed

Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, United States  
International Society for Optical Engineering, Bellingham WA, United States.; International Biomedical Optics Society, United States.

Three-dimensional and multidimensional microscopy. Conference, 5 (San Jose CA USA) 1998-01-27

Journal: SPIE proceedings series, 1998, 3261 193-204

Language: English

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... of the image formation process has been developed for the Nomarski differential interference contrast (DIC) **microscope** . The DIC **microscope** images variations of the **phase** of the light wave transmitted through the specimen. In the study of biological phenomena, the...

... to visualize live cells which are highly transparent in the visible spectra but distort the **phase** of the impinging light wave. Within the **microscope** , a birefringent prism splits the transmitted light wave into two laterally sheared wavefronts. An interference pattern is imaged when the wavefronts recombine. The computational model we developed uses polarization **ray - tracing** techniques. **Rays** propagating through different microscope components and the specimen are **traced** . A specimen is represented by a 3-D grid of voxels, each containing a complex **refractive index** . At the image plane, a coherent superposition of the diffracted field due to each ray...

... to use this computational model for the reverse problem, i.e. to reconstruct the 3D **refractive index distribution** of an imaged specimen.

English Descriptors: Image forming; Modelling; Computerized simulation;  
Contrast effect; Interference **microscopy** ; **Phase** analysis;  
Interference fringe; **Ray tracing** ; Optical properties; Technique

French Descriptors: Formation image; Modelisation; Simulation ordinateur;  
Effet contraste; **Microscopie** interferentielle; Analyse **phase** ; Frange  
interference; **Trace rayon** ; Propriete optique; Technique

?

23/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

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5538341 INSPEC Abstract Number: A9709-8280T-024, B9705-7230-020

**Title: Surface plasmon resonance sensor based on planar light pipe: theoretical optimization analysis**

Author(s): Homola, J.; Yee, S.S.

Author Affiliation: Inst. of Radio Eng. & Electron., Prague, Czech Republic

Journal: Sensors and Actuators B (Chemical) vol.B37, no.3 p.145-50

Publisher: Elsevier,

Publication Date: Dec. 1996 Country of Publication: Switzerland

CODEN: SABCEB ISSN: 0925-4005

SICI: 0925-4005(199612)B37:3L.145:SPRS;1-2

Material Identity Number: N867-97005

U.S. Copyright Clearance Center Code: 0925-4005/96/\$15.00

Language: English

Subfile: A B

Copyright 1997, IEE

...Abstract: surface plasmon resonance excitation at multiple angles and multiple wavelengths is studied theoretically employing the **ray - tracing** method. On the basis of the theoretical analysis, the sensing structure is optimized for operation in an aqueous environment. Two advantageous configurations of the sensor allowing the **measurement** of the **refractive index** of **samples** at multiple wavelengths and multicomponent chemical sensing are investigated.

...Descriptors: **ray tracing** ;

...Identifiers: **ray - tracing** method

23/3,K/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2005 Institution of Electrical Engineers. All rts. reserv.

5123425 INSPEC Abstract Number: A9601-8760F-005

**Title: Determination of the refractive index of highly scattering human tissue by optical coherence tomography**

Author(s): Tearney, G.J.; Brezinski, M.E.; Southern, J.F.; Bouma, B.E.; Hee, M.R.; Fujimoto, J.G.

Author Affiliation: Dept. of Electr. Eng. & Comput. Sci., MIT, Cambridge, MA, USA

Journal: Optics Letters vol.20, no.21 p.2258-60

Publication Date: 1 Nov. 1995 Country of Publication: USA

CODEN: OPLEDP ISSN: 0146-9592

U.S. Copyright Clearance Center Code: 0146-9592/95/212258-03\$6.00/0

Language: English

Subfile: A

Copyright 1995, IEE

...Abstract: vitro human tissue, using OCT to measure the physical and optical path lengths of the **sample**. We obtained **measurements** of the **refractive index** of in vitro and in vivo human tissue, using OCT to **track** the focal length shift that results from translating the focus along the optic axis within...

23/3,K/3 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2005 Institution of Electrical Engineers. All rts. reserv.

4555579 INSPEC Abstract Number: A9403-9530-009

**Title: Production and optical constants of ice tholin from charged particle irradiation of (1:6) C/sub 2/H/sub 6//H/sub 2/O at 77 K**

Author(s): Khare, B.N.; Thompson, W.R.; Cheng, L.; Chyba, C.; Sagan, C.; Arakawa, E.T.; Meisse, C.; Tuminello, P.S.

Author Affiliation: Lab. for Planetary Studies, Cornell Univ., Ithaca, NY, USA

Journal: Icarus vol.103, no.2 p.290-300

Publication Date: June 1993 Country of Publication: USA

CODEN: ICRSA5 ISSN: 0019-1035

U.S. Copyright Clearance Center Code: 0019-1035/93/\$5.00

Language: English

Subfile: A

...Abstract: all features present in the spectrum of the original residue except for those due to **traces** of adsorbed water. The imaginary part of the **refractive index**,  $k$ , was obtained by transmission **measurements** on thin film **samples** and by Kramers-Kronig analysis on reflectance. The real part of the refractive index,  $n$ ...

23/3,K/4 (Item 4 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2005 Institution of Electrical Engineers. All rts. reserv.

02379969 INSPEC Abstract Number: A85018310

**Title: Constraints on the fusion processes of some natural glasses**

Author(s): Nasrallah, M.M.; Weeks, R.A.

Author Affiliation: Fac. of Eng., Cairo Univ., Egypt

Journal: Journal of Non-Crystalline Solids vol.67, no.1-3 p.169-77

Publication Date: Sept. 1984 Country of Publication: Netherlands

CODEN: JNCSEB ISSN: 0022-3093

U.S. Copyright Clearance Center Code: 0022-3093/84/\$03.00

Conference Title: Proceedings of the International Conference on Glass in Planetary and Geological Phenomena

Conference Date: 14-18 Aug. 1983 Conference Location: Alfred, NY, USA

Language: English

Subfile: A

Abstract: Electron paramagnetic resonance (EPR) spectroscopy, **trace** element analysis, and **refractive index measurements** were conducted on **specimens** of Libyan Desert Glasses (LDG) and tektites. The EPR spectra of LDG consists of components...

...Identifiers: **trace** element

23/3,K/5 (Item 1 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

(c) 2005 Elsevier Eng. Info. Inc. All rts. reserv.

01477161 E.I. Monthly No: EI8401005086 E.I. Yearly No: EI84079494

**Title: SPECTROPHOTOMETRIC DETERMINATION OF METALS AT TRACE LEVELS BY FLOW INJECTION AND SERIES DIFFERENTIAL DETECTION.**

Author: Leach, R. A.; Ruzicka, J.; Harris, J. M.

Corporate Source: Univ of Utah, Dep of Chemistry, Salt Lake City, Utah, USA

Source: Analytical Chemistry v 55 n 11 Sep 1983 p 1669-1673

Publication Year: 1983

CODEN: ANCHAM ISSN: 0003-2700

Language: ENGLISH

**Title: SPECTROPHOTOMETRIC DETERMINATION OF METALS AT TRACE LEVELS BY FLOW INJECTION AND SERIES DIFFERENTIAL DETECTION.**

...Abstract: were 0. 7 ppb, 0. 3 ppb, and 1. 0 ppb, respectively. The effect of **sample refractive index** on the **measurement** was considered where the absorbance and refractive index responses are distinguishable by their respective peak...

**23/3,K/6 (Item 1 from file: 34)**

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2005 Inst for Sci Info. All rts. reserv.

03176367 Genuine Article#: NJ538 No. References: 27

**Title: SIMULTANEOUS MEASUREMENT OF MUTUAL DIFFUSION AND INTRADIFFUSION BY TAYLOR DISPERSION**

Author(s): LEAIST DG; HAO L

Corporate Source: UNIV WESTERN ONTARIO, DEPT CHEM/LONDON N6A 5B7/ON/CANADA/

Journal: JOURNAL OF PHYSICAL CHEMISTRY, 1994, V98, N17 (APR 28), P4702-4706

ISSN: 0022-3654

Language: ENGLISH Document Type: ARTICLE (Abstract Available)

...Abstract: H2O + solute + HDO is injected into a carrier solution of H2O + solute. The change in **refractive index** across the dispersed **sample** is **measured** downstream from the point of injection. Fitting two Gaussians to the refractive-index profile gives...

...Identifiers-- **TRACER** DIFFUSION; SELF-DIFFUSION; SOLUTES; LIQUIDS; WATER

Research Fronts: 92-0601 001 ( **TRACER** DISPERSION IN STRATIFIED

POROUS-MEDIA; SOLUTE TRANSPORT; BINARY MUTUAL DIFFUSION-COEFFICIENTS;

TUBE FLOW; CAPILLARY ELECTROPHORESIS...

**23/3,K/7 (Item 2 from file: 34)**

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2005 Inst for Sci Info. All rts. reserv.

01345499 Genuine Article#: GR276 No. References: 30

**Title: TERNARY DIFFUSION-COEFFICIENTS FOR THE ILL-CONDITIONED SYSTEMS KCL-KI-H2O AND NACL-NAI-H2O MEASURED BY A 2-DETECTOR TAYLOR DISPERSION METHOD**

Author(s): LU H; LEAIST DG

Corporate Source: UNIV WESTERN ONTARIO, DEPT CHEM/LONDON N6A

5B7/ONTARIO/CANADA/; UNIV WESTERN ONTARIO, DEPT CHEM/LONDON N6A

5B7/ONTARIO/CANADA/

Journal: JOURNAL OF THE CHEMICAL SOCIETY-FARADAY TRANSACTIONS, 1991, V87, N22, P3667-3670

Language: ENGLISH Document Type: ARTICLE (Abstract Available)

...Abstract: degrees-C by the Taylor dispersion (peak-broadening) method. The broadened distribution of injected solution **samples** is followed by **monitoring** the changes in both the **refractive index** and the electrical conductivity as the **samples** flow out of the dispersion

tube. Resolving the diffusion of the dissolved salts by refractive...  
Research Fronts: 89-1141 002 (HYDRODYNAMIC **TRACER** DISPERSION; CAPILLARY  
COLUMNS; SUPERCRITICAL FLUID CHROMATOGRAPHY; PARALLEL MODEL;  
OSCILLATORY FLOW; SUB-MICRON PARTICLES)  
89-5925 001 (PARTIAL MOLAR VOLUMES; **TRACER** CAFFEINE DIFFUSION IN  
AQUEOUS-SOLUTIONS; NaCl-MgCl<sub>2</sub>-H<sub>2</sub>O AT 25-DEGREES-C; LIQUID METHANOL;  
SOLVATION...

23/3,K/8 (Item 1 from file: 35)  
DIALOG(R)File 35:Dissertation Abs Online  
(c) 2005 ProQuest Info&Learning. All rts. reserv.

889814 ORDER NO: AAD85-16488  
**ANAMORPHIC GRADIENT INDEX LENS SYSTEMS**

Author: STAGAMAN, JOAN MARIE  
Degree: PH.D.  
Year: 1985  
Corporate Source/Institution: THE UNIVERSITY OF ROCHESTER (0188)  
Source: VOLUME 46/06-B OF DISSERTATION ABSTRACTS INTERNATIONAL.  
PAGE 1971. 155 PAGES

...used to evaluate the importance of anamorphic gradient-index lens  
systems in optical design.

A **ray trace** algorithm is formulated to calculate the paths of  
rays through anamorphic gradient-index media. The **ray trace** algorithm  
is based upon a power series expansion of the ray path and the index...

...into elliptical rods and plane slabs are performed.

An AC shearing interferometer is constructed to **measure** the  
**index** of **refraction** profile of anamorphic gradient-index **samples**.  
Measurements are made of the phase variation across the sheared wavefront.  
The index of refraction...

23/3,K/9 (Item 1 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2005 Japan Science and Tech Corp(JST). All rts. reserv.

03001717 JICST ACCESSION NUMBER: 96A0902361 FILE SEGMENT: JICST-E  
**Analysis of Multiple Layers by a Confocal Interference Microscope Using a  
Low Coherence Source.**

YAMAGUCHI ICHIRO (1); FUKANO TAKASHI (2)

(1) Riken Inst. of Phys. and Chem. Res.; (2) Sci. Univ. of Tokyo, Grad.  
Sch.

Reza Kagaku Kenkyu(Laser Science Progress Report of IPCR), 1996, NO.18,  
PAGE.122-124, FIG.3, TBL.1, REF.13

JOURNAL NUMBER: G0834BAK ISSN NO: 0289-8411

UNIVERSAL DECIMAL CLASSIFICATION: 535.41.08:681.787 535.39.08:681.785.2

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

...ABSTRACT: We derived an expression for geometrical thicknesses and  
refractive indices of each layer from both **tracing** of a marginal **ray**  
accepted by a microscope objective and optical path matching  
conditions. Experimental verification of this method is presented by

several **samples** . The geometrical thicknesses and **refractive indices** derived agreed well with those **measured** by a micrometer or those cited from literature. (author abst.)

?



27/3,K/1 (Item 1 from file: 8)

DIALOG(R) File 8: Ei Compendex(R)

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05282679 E.I. No: EIP99054676444

Title: Zygo interferometer for measuring refractive index of photorefractive bismuth silicon oxide (Bi//1//2SiO//2//0) crystal

Author: Shukla, R.P.; Udupa, D.V.; Aggarwal, M.D.

Corporate Source: Bhabha Atomic Research Cent, Mumbai, India

Source: Optics and Laser Technology v 30 n 6 1998. p 425-430

Publication Year: 1998

CODEN: OLTCAS ISSN: 0030-3992

Language: English

...Abstract: order of 1  $\mu$  m in the Zygo phase measuring interferometer. The mean value of refractive index of BSO crystal measured by the interferometer for several samples of thickness in the range of 3-9 mm is 2.542 at a wavelength...

...It is possible to achieve an accuracy of plus or minus 0.0003 for a sample of thickness of 30 mm in the measurement of refractive index due to high setting accuracy of the Zygo system. (Author abstract) 21 Refs.

Identifiers: Zygo interferometer; Bismuth silicon oxide; Setting accuracy; Phase shifting adapter; Optical path difference; Interferograms  
?

29/3,K/1 (Item 1 from file: 8)  
DIALOG(R) File 8: Ei Compendex(R)  
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04111243 E.I. No: EIP95032624722

**Title: Analysis of photon-scanning tunneling microscope images of inhomogeneous samples : determination of the local refractive index of channel waveguides**

Author: Bourillot, E.; de Fornel, F.; Goudonnet, J.P.; Persegol, D.; Kevorkian, A.; Delacourt, D.

Corporate Source: Universite de Bourgogne, Dijon, Fr

Source: Journal of the Optical Society of America A: Optics and Image Science, and Vision v 12 n 1 Jan 1995. p 95-106

Publication Year: 1995

CODEN: JOAOD6 ISSN: 0740-3232

Language: English

**Title: Analysis of photon-scanning tunneling microscope images of inhomogeneous samples : determination of the local refractive index of channel waveguides**

Abstract: The photon-scanning tunneling microscope (PSTM) was demonstrated to provide **images** that give **information** about the local variations of the refractive index of inhomogeneous samples, such as channel waveguides...

?

**34/3,K/1** (Item 1 from file: 2)  
DIALOG(R)File 2:INSPEC  
(c) 2005 Institution of Electrical Engineers. All rts. reserv.

5631847 INSPEC Abstract Number: A9716-0760P-016, B9708-7510B-200,  
C9708-7330-331

**Title: Interferometric-computed microtomography of 3D phase objects**  
Author(s): Vishnyakov, G.N.; Levin, G.G.; Zakarian, C.S.  
Author Affiliation: Res. Inst. for Optophys. Meas., Moscow, Russia  
Journal: Proceedings of the SPIE - The International Society for Optical  
Engineering Conference Title: Proc. SPIE - Int. Soc. Opt. Eng. (USA)  
vol.2984 p.64-71  
Publisher: SPIE-Int. Soc. Opt. Eng,  
Publication Date: 1997 Country of Publication: USA  
CODEN: PSISDG ISSN: 0277-786X  
SICI: 0277-786X(1997)2984L:64:ICMP;1-3  
Material Identity Number: C574-97123  
U.S. Copyright Clearance Center Code: 0277-786X/97/\$10.00  
Conference Title: Three-Dimensional Microscopy: Image Acquisition and  
Processing IV  
Conference Sponsor: SPIE  
Conference Date: 12-13 Feb. 1997 Conference Location: San Jose, CA,  
USA  
Language: English  
Subfile: A B C  
Copyright 1997, IEE

Abstract: **Measurements of refractive index** spatial distribution  
within optically transparent **phase 3-D samples** with computerized  
interferometric **microscopes** is proposed. For the reconstruction of the  
**phase** information the **phase** shifting interferometry is used.  
Interferometric computed-tomography **microscopes** are fully automated  
integrated systems that incorporate CCD camera, frame grabber, computed  
operated PZT mirror...

**34/3,K/2** (Item 2 from file: 2)  
DIALOG(R)File 2:INSPEC  
(c) 2005 Institution of Electrical Engineers. All rts. reserv.

4605982 INSPEC Abstract Number: A9407-0760P-002

**Title: Computer-aided approach to slit phase contrast microscopy**  
Author(s): Litwin, D.  
Author Affiliation: Inst. of Appl. Optics, Warsaw, Poland  
Journal: Optical Engineering vol.32, no.12 p.3193-8  
Publication Date: Dec. 1993 Country of Publication: USA  
CODEN: OPEGAR ISSN: 0091-3286  
U.S. Copyright Clearance Center Code: 0091-3286/93/\$6.00  
Language: English  
Subfile: A

**Title: Computer-aided approach to slit phase contrast microscopy**  
...Abstract: filters are prepared and applied to a modified commercial  
microscope. The experiments mainly involve biological **specimens**. Special  
attention is given to **measurements** of the **refractive index** profile of  
the optical fibers. A detailed theoretical background is presented and the  
results of...

Identifiers: slit **phase contrast microscopy** ;

**34/3,K/3 (Item 1 from file: 8)**  
DIALOG(R)File 8: Ei Compendex(R)  
(c) 2005 Elsevier Eng. Info. Inc. All rts. reserv.

06138326 E.I. No: EIP02397098788

**Title: Three-dimensional limited-angle microtomography of blood cells: Experimental results**

Author: Levin, Gennady G.; Vishnyakov, Gennady N.; Zakarian, Constantin S.; Likhachov, Alexey V.; Pickalov, Valery V.; Kozinets, Gennady I.; Novoderzhkina, Julia K.; Streletskaya, Elena A.

Corporate Source: Russian Research Institute, Moscow, 119361, Russian Federation

Conference Title: Proceedings of Three-Dimensional and Multidimensional Microscopy: Image Acquisition and Processing V

Conference Location: San Jose, CA, United States Conference Date: 19980127-19980129

E.I. Conference No.: 59662

Source: Proceedings of SPIE - The International Society for Optical Engineering v 3261 1998. p 159-164

Publication Year: 1998

CODEN: PSISDG ISSN: 0277-786X

Language: English

Abstract: Tomographic **measurements** of the 3D **refractive index** spatial distribution within optically transparent **phase samples** with computerized interferometric **microscopes** are proposed. **Phase** shifting interferometric microtomography applications for the 3D image reconstruction of the blood cells (lymphocytes) are...

**34/3,K/4 (Item 2 from file: 8)**  
DIALOG(R)File 8: Ei Compendex(R)  
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01253894 E.I. Monthly No: EIM8211-049922

**Title: SPOT MEASUREMENT SPOT MODULATION MICROSCOPE.**

Author: Chaffee, M. A.; Allen, R. D.; Hansen, E. W.; Strohbehn, J. W.

Corporate Source: Dartmouth Coll, Hanover, NH, USA

Conference Title: Proceedings of the 10th Annual Northeast Bioengineering Conference.

Conference Location: Hanover, NH, USA Conference Date: 19820315

E.I. Conference No.: 00685

Source: Bioengineering, Proceedings of the Northeast Conference 10th. Publ by IEEE, New York, NY, USA. Available from IEEE Serv Cent (Cat n 82CH1747-5), Piscataway, NJ, USA p 236-240

Publication Year: 1982

CODEN: BENYDB

Language: English

Identifiers: MICROBIOLOGICAL SPECIMEN SPOT MEASUREMENTS ;  
BIREFRINGENCE RETARDATION; REFRACTIVE INDEX ; BASIC POLARIZATION  
MICROSCOPE ; PHASE MODULATION PRINCIPLES; LINEAR FERROELECTRIC CERAMIC;  
RADIANT POWER SIGNAL

**34/3,K/5 (Item 1 from file: 34)**

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2005 Inst for Sci Info. All rts. reserv.

06598183 Genuine Article#: ZD695 No. References: 15

**Title: Interferometric back focal plane microellipsometry**

Author(s): Feke GD (REPRINT) ; Snow DP; Grober RD; deGroot PJ; Deck L  
Corporate Source: YALE UNIV,DEPT APPL PHYS/NEW HAVEN//CT/06520 (REPRINT);  
ZYGO CORP,/MIDDLEFIELD//CT/06455

Journal: APPLIED OPTICS, 1998, V37, N10 (APR 1), P1796-1802

ISSN: 0003-6935 Publication date: 19980401

Publisher: OPTICAL SOC AMER, 2010 MASSACHUSETTS AVE NW, WASHINGTON, DC  
20036

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

...Abstract: normal incidence, both of which are measurable with the same  
apparatus. Hence we accomplish local **measurements** of the **refractive**  
**indices** of our **samples**. **Determination** of the phase change on  
reflection permits correction of interferometric topography  
measurements of heterogeneous specimens...

...Identifiers-- **PHASE** -SHIFTING INTERFEROMETRY; OPTICAL PROFILOMETRY;  
**MICROSCOPY**

**34/3,K/6 (Item 1 from file: 92)**

DIALOG(R)File 92:IHS Intl.Stds.& Specs.

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00163127

**Standard Test Method for the Automated Determination of Refractive**  
**Index of Glass Samples Using the Oil Immersion Method and a Phase**  
**Contrast Microscope**

DOCUMENT NUMBER: E1967

ISSUING ORGANIZATION: ASTM - American Society For Testing & Materials

DOCUMENT TYPE: United States of America;North America (NAFTA Countries)

YEAR: 1998 00003 PAGES LANGUAGE: ENGLISH

**Standard Test Method for the Automated Determination of Refractive**  
**Index of Glass Samples Using the Oil Immersion Method and a Phase**  
**Contrast Microscope**

...DESCRIPTORS: **Phase Contrast Microscopy ; Phase Contrast**  
**Microscopy** : Refractive Index...

... **Phase Contrast Microscopy**

?

? show files; ds; save temp; logoff hold  
File 344:Chinese Patents Abs Aug 1985-2005/May  
(c) 2005 European Patent Office  
File 347:JAPIO Nov 1976-2005/Apr(Updated 050801)  
(c) 2005 JPO & JAPIO  
File 350:Derwent WPIX 1963-2005/UD,UM &UP=200554  
(c) 2005 Thomson Derwent

Set	Items	Description
S1	83475	(INDEX? OR INDICES ) (3N)REFRACT? OR (REFRACT? OR INDEX? OR INDICES) (3N)(DISTRIBUT? OR CHARACTER?)
S2	2970	S1(5N)(DETERMIN? OR CONFIRM? OR CHECK? OR MONITOR? OR DECIDE? OR IDENTIF? OR MEASURE?)
S3	228	S2(7N)(SAMPLE? OR SPECIMEN?)
S4	445332	(RAY? OR BEAM OR LIGHT ) (3N)TRAC? OR TRAC? OR RAYTRAC?
S5	5617	ADAPT?(7N)OPTIC?
S6	118734	IMAG?(3N)(ACQUIR? OR INFORMAT?) OR INFORMATION(3N)ACQUIR?
S7	285303	3D OR (THREE OR THIRD OR 3) (3N)(DIMENSION? OR SHAPE? OR MODEL? OR REPRESENTATION? OR IMAG? OR OBJECT??)
S8	926	DIFFERENTIAL() INTERFERENCE() CONTRAST OR DIC
S9	3047	MICROSCOP?(7N)(FLUORESCEN? OR PHASE)
S10	5	AU=(KAM, Z? OR KAM Z?)
S11	200179	IC=G06K?
S12	1	S10 AND S1
S13	0	S1 AND S4 AND S8
S14	1	S1 AND S4 AND S9
S15	1	S14 NOT S12
S16	4	S3 AND S4
S17	4	S16 NOT (S12 OR S15)
S18	0	S3 AND S5
S19	1	S3 AND S6
S20	0	S 19 NOT (S17 OR S12 OR S15)
S21	5	S3 AND S7
S22	0	S 21 NOT (S17 OR S12 OR S15)
S23	0	S3 AND S8
S24	1	S3 AND S9
S25	1	S24 NOT (S17 OR S12 OR S15)

12/3,K/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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013251203 \*\*Image available\*\*  
WPI Acc No: 2000-423086/200036  
XRPX Acc No: N00-315741

**Computerized adaptive imaging apparatus utilizes location dependent point spread function, to provide output image corrected for various distortions**

Patent Assignee: UNIV CALIFORNIA (REGC ); YEDA RES & DEV CO LTD (YEDA )  
Inventor: AGARD D A; HAUSER B M; **KAM Z** ; SEDAT J W; HANSER B M  
Number of Countries: 023 Number of Patents: 004  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200033250	A2	20000608	WO 99IL645	A	19991130	200036 B
EP 1135746	A2	20010926	EP 99973145	A	19991130	200157
			WO 99IL645	A	19991130	
JP 2002531840	W	20020924	WO 99IL645	A	19991130	200278
			JP 2000585823	A	19991130	
US 6658142	B1	20031202	US 99238225	A	19990127	200379

Priority Applications (No Type Date): US 99238225 A 19990127; IL 127359 A 19981201

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200033250	A2	E	32	G06T-001/00	
				Designated States (National):	CA IL JP US
				Designated States (Regional):	AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
EP 1135746	A2	E		G06T-001/00	Based on patent WO 200033250
				Designated States (Regional):	AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
JP 2002531840	W		35	G01N-021/17	Based on patent WO 200033250
US 6658142	B1			G06K-009/00	

...Inventor: **KAM Z**

Abstract (Basic):

... A ray tracer utilizes information related to the **refractive characteristics** in a three dimensional imaged volume, so as to trace several rays from various locations...

... The image is corrected for the distortions due to variations in the **refractive characteristics** in the three dimensional imaged volume. An INDEPENDENT CLAIM is also included for computational adaptive...

...Enables correcting aberrations resulting from the variations in **refractive index** , effectively...

?

15/3,K/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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007565326

WPI Acc No: 1988-199258/198829

XRAM Acc No: C88-088906

XRPX Acc No: N88-152059

**Immersion oil for microscopy - comprising phthalic acid dialkyl ester and chlorinated paraffin**

Patent Assignee: IDEMITSU PETROCHEM CO (IDEM ); IDEMITSU PETROCHEM CO LTD (IDEM )

Inventor: TANAKA T

Number of Countries: 011 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 274731	A	19880720	EP 87119129	A	19871223	198829 B
JP 63174009	A	19880718	JP 876807	A	19870114	198834
US 4832855	A	19890523	US 87137216	A	19871222	198924
EP 274731	B1	19940323	EP 87119129	A	19871223	199412
DE 3789439	G	19940428	DE 3789439	A	19871223	199418
			EP 87119129	A	19871223	
EP 274731	B2	20030212	EP 87119129	A	19871223	200313

Priority Applications (No Type Date): JP 876807 A 19870114

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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EP 274731	A	E	10		
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Designated States (Regional): BE CH DE FR GB IT LI NL SE

US 4832855	A		5		
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EP 274731	B1	E	10	G02B-021/00	
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Designated States (Regional): BE CH DE FR GB IT LI NL SE

DE 3789439	G			G02B-021/00	Based on patent EP 274731
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EP 274731	B2	E		G02B-021/00	
-----------	----	---	--	-------------	--

Designated States (Regional): BE CH DE FR GB IT LI NL SE

...Abstract (Basic): USE/ADVANTAGE - The mixts. have the characteristics required of an immersion oil for **microscopy**, and esp. **fluorescence microscopy**, including high transparency, desirable **refractive index**, Abbe number, kinematic viscosity, non-drying properties, resistance to weathering, corrosion resistance, resolving power and...

...Abstract (Equivalent): dialkyl ester and a chlorinated paraffin and not containing butyl benzyl phthalate in more than **trace** amounts...

...Abstract (Equivalent): and a chlorinated paraffin contg. 60-75 wt.% Cl. ADVANTAGE - Oil has desired properties for **fluorescence microscopy**, e.g. **refractive index**, Abbe's number, kinematic viscosity, contrast, resolving power, transparency, etc...

?



17/3,K/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX  
(c) 2005 Thomson Derwent. All rts. reserv.

016045979 \*\*Image available\*\*  
WPI Acc No: 2004-203830/200419  
XRAM Acc No: C04-211891  
XRPX Acc No: N04-459349

Optical assembly has light source to provide beam of collimated light,  
sample vessel(s) with wall and core, and detector with detector locations  
Patent Assignee: UNIV YORK (UYYO-N); PARAYTEC LTD (PARA-N)  
Inventor: ALLINSON N M; BERGSTROM E T; GOODALL D M; MOON K J  
Number of Countries: 106 Number of Patents: 003  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200417061	A1	20040226	WO 2003GB3591	A	20030815	200419 B
AU 2003259329	A1	20040303	AU 2003259329	A	20030815	200457
EP 1530716	A1	20050518	EP 2003787908	A	20030815	200533
			WO 2003GB3591	A	20030815	

Priority Applications (No Type Date): GB 200219248 A 20020817

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200417061	A1	E	88	G01N-027/447	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA  
CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO  
NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US  
UZ VC VN YU ZA ZM ZW

Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB  
GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ  
UG ZM ZW

AU 2003259329 A1 G01N-027/447 Based on patent WO 200417061

EP 1530716 A1 E G01N-027/447 Based on patent WO 200417061

Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB  
GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

Abstract (Basic):

... The figure shows a light beam ray - tracing diagram  
illustrating a light path through a water-filled capillary...

Technology Focus:

... additionally comprises selecting a sample for analysis,  
determining individual wavelengths at which absorption by desired  
sample components is strongest, checking refractive index of the  
sample to select a suitable sample vessel which when containing the  
sample and when illuminated will generate spatially separated beams or  
...

17/3,K/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX  
(c) 2005 Thomson Derwent. All rts. reserv.

012506869 \*\*Image available\*\*  
WPI Acc No: 1999-312974/199926  
XRAM Acc No: C99-092414

Labelling polymers by attaching labels to randomly generated free radical  
sites

Patent Assignee: BURKE N A D (BURK-I); GUILLET J E (GUIL-I); PREMAXIS

TECHNOLOGY VENTURES INC (PREM-N)

Inventor: BURKE N A D; GUILLET J E; BURKE N A  
 Number of Countries: 084 Number of Patents: 005  
 Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9922020	A2	19990506	WO 98CA981	A	19981022	199926 B
AU 9895270	A	19990517	AU 9895270	A	19981022	199939
EP 1025263	A2	20000809	EP 98948653	A	19981022	200039
			WO 98CA981	A	19981022	
JP 2001520893	W	20011106	WO 98CA981	A	19981022	200203
			JP 2000518110	A	19981022	
US 6383750	B1	20020507	US 9764838	P	19971023	200235
			WO 98CA981	A	19981022	
			US 2000530043	A	20001127	

Priority Applications (No Type Date): US 9764838 P 19971023; US 2000530043  
 A 20001127

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9922020	A2	E	55	C12Q-001/68	
Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW					
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
AU 9895270	A				Based on patent WO 9922020
EP 1025263	A2	E		C12Q-001/68	Based on patent WO 9922020
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
JP 2001520893	W		52	C12Q-001/68	Based on patent WO 9922020
US 6383750	B1			C12Q-001/68	Provisional application US 9764838 Based on patent WO 9922020

Abstract (Basic):

... g. to render it biocompatible, or for diagnosis or drug delivery; to label polymers for **tracking** them in the environment; for studying dynamics of polymer movement and chain-chain interactions, also...

Extension Abstract:

... microliters by ultrafiltration, washed and the retentate diluted to 0.4 ml with water. The **sample** was analyzed by gel-permeation chromatography, with **refractive index monitoring**. The strength of the signal depended on the concentration of hydrogen peroxide used, and calculation...

17/3,K/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX  
 (c) 2005 Thomson Derwent. All rts. reserv.

012228354 \*\*Image available\*\*  
 WPI Acc No: 1999-034461/199903  
 XRAM Acc No: C99-010332  
 XRPX Acc No: N99-025805

**Determination of three dimensional fibre orientation in a fibre reinforced polymeric composite - by microscopic examination of tracer fibres and computer analysis of recorded images**

Patent Assignee: UNIV MICHIGAN STATE (UNMS )  
 Inventor: MCGRATH J J; WILLE J M

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5841892	A	19981124	US 95455516	A	19950531	199903 B
			US 97903709	A	19970713	

Priority Applications (No Type Date): US 95455516 A 19950531; US 97903709 A 19970713

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5841892	A	E	47	G06T-007/60	Cont of application US 95455516

... by microscopic examination of tracer fibres and computer analysis of recorded images

...Abstract (Basic): polymeric material, having reinforcing fibres with refractive index similar to that of the polymer, and **tracer** fibres with a different **refractive index**, is **determined** by optical microscopic examination of the **sample**, and recording images of the **tracer** fibre at layers within the sample in a field of view of the microscope (60...

...image. The computer analyses the thinned image to determine the orientation of at least one **tracer** fibre by locating a set voxel, moving along a chain of voxels contiguous with the...

...the smallest principle moment of inertia for the body to determine an axis of the **tracer** fibre to determine the orientation of fibres in the sample...

...method above and the method as above in which the microscope images recorded of the **tracer** fibres at layers within the sample along a line of sight of the microscope through...

...Title Terms: **TRACER** ;

17/3,K/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

011406930 \*\*Image available\*\*

WPI Acc No: 1997-384837/199735

XRPX Acc No: N97-320426

**Micro-particles in liq sample size and refractive index determining device - has lens, pinhole and photodetector arranged such that in operation laser light impinges on individual micro-particles in capillary flow channel and is scattered onto spherical reflector**

Patent Assignee: SOINI E (SOIN-I)

Inventor: CHERNYSHEV A V; MALTSEV V P

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5650847	A	19970722	US 95490454	A	19950614	199735 B

Priority Applications (No Type Date): US 95490454 A 19950614

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5650847	A		18		

•  
.  
.  
•     **Micro-particles in liq sample size and refractive index**  
determining **device...**

...Abstract (Basic): real-time sizing of particles in absolute terms  
without need for calibrating electronic and optic **tracks** of device...  
?

25/3,K/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2005 Thomson Derwent. All rts. reserv.

012701435 \*\*Image available\*\*  
WPI Acc No: 1999-507544/199942  
XRPX Acc No: N99-378115

**Illuminating system for distinguishing micron-size features of  
transparent material such as waveguides used for telecommunication  
applications**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )  
Inventor: COBB J M; FLORENCE R F; TOPOLOVEC F X; ZIEMINS U A  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5926311	A	19990720	US 97808928	A	19970228	199942 B

Priority Applications (No Type Date): US 97808928 A 19970228

**Patent Details:**

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5926311	A	4	G02B-021/06	

**Abstract (Basic):**

... distinguishing micron size features of transparent specimens  
such as waveguide used for telecommunication, without using **phase**  
contrast **microscope** .  
...

...angle to an axis perpendicular to specimen and mirror, the micron size  
features in transparent **specimen** having similar **refractive indices**  
are **measured** accurately. As fiber optic bundle is used, the light is  
directed correctly on the specimen

?

? show files; ds; save temp; logoff hold  
 File 348:EUROPEAN PATENTS 1978-2005/Aug W02  
 (c) 2005 European Patent Office  
 File 349:PCT FULLTEXT 1979-2005/UB=20050825,UT=20050818  
 (c) 2005 WIPO/Univentio

Set	Items	Description
S1	54720	(INDEX? OR INDICES ) (3N) REFRACT? OR (REFRACT? OR INDEX? OR INDICES) (3N) (DISTRIBUT? OR CHARACTER?)
S2	6775	S1(5N) (DETERMIN? OR CONFIRM? OR CHECK? OR MONITOR? OR DECID? OR IDENTIF? OR MEASURE?)
S3	536	S2(7N) (SAMPLE? OR SPECIMEN?)
S4	146377	(RAY? OR BEAM OR LIGHT ) (3N) TRAC? OR TRAC? OR RAYTRAC?
S5	11446	ADAPT? (7N) OPTIC?
S6	56066	IMAG? (3N) (ACQUIR? OR INFORMAT?) OR INFORMATION(3N) ACQUIR?
S7	327404	3D OR (THREE OR THIRD OR 3) (3N) (DIMENSION? OR SHAPE? OR MO-DEL? OR REPRESENTATION? OR IMAG? OR OBJECT??)
S8	7085	DIFFERENTIAL() INTERFERENCE() CONTRAST OR DIC
S9	18369	MICROSCOP? (7N) (FLUORESCEN? OR PHASE)
S10	8	AU=(KAM, Z? OR KAM Z?)
S11	27017	IC=G06K?
S12	0	S11 AND S10
S13	3	S1(S) S4(S) S8
S14	7	S1(S) S4(S) S9
S15	6	S3(S) S4
S16	6	S15 NOT (S13 OR S14)
S17	0	S3(S) S5
S18	1	S3(S) S6
S19	1	S18 NOT (S16 OR S13 OR S14)
S20	0	S3(S) S8
S21	3	S3(S) S9
S22	3	S21 NOT (S19 OR S16 OR S13 OR S14)
S23	148	S7(S) S4(S) S6
S24	10	S23(S) S1
S25	8	S24 NOT (S22 OR S19 OR S16 OR S13 OR S14)
S26	2	S10 AND S1



...

...methods of laser scanning confocal microscopy, brightfield or epi-polarization microscopy, and reflection contrast and **differential interference contrast** microscopy. However these methods and apparatus are not as easy to use and inexpensive as...

13/3,K/2 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2005 WIPO/Univentio. All rts. reserv.

00569877 \*\*Image available\*\*

**COMPUTERIZED ADAPTIVE IMAGING**  
**IMAGERIE ADAPTATIVE INFORMATISEE**

Patent Applicant/Assignee:

YEDA RESEARCH AND DEVELOPMENT CO LTD,  
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA,  
KAM Zvi,  
SEDAT John W,  
AGARD David A,  
HAUSER Bridget M,

Inventor(s):

KAM Zvi,  
SEDAT John W,  
AGARD David A,  
HAUSER Bridget M,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200033250 A2 20000608 (WO 0033250)  
Application: WO 99IL645 19991130 (PCT/WO IL9900645)  
Priority Application: IL 127359 19981201; US 99238225 19990127

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

CA IL JP US AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 6237

Fulltext Availability:

Detailed Description

Detailed Description

... three-dimensional images.

In accordance with a preferred embodiment of the present invention, the  
4

**ray tracer** and the deconvolver utilize the information relating to the **refractive characteristics** in a three-dimensional imaged volume obtained from one of the three-dimensional images to...

...at least another one of the three-dimensional image  
or itself

The acquirer may obtain **refractive index** information from DIC , or from

phase microscopy or from fluorescence -for example in DNA associated stains wherein the stain intensity is proportional to the **refractive index** increment.

Refractive index mapping may be applied to samples whose refractive index is known. For example this may...

13/3,K/3 (Item 3 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2005 WIPO/Univentio. All rts. reserv.

00489437

**ANALYTE ASSAY USING PARTICULATE LABELS**

**TITRAGE D'ANALYTES UTILISANT DES MARQUEURS PARTICULAIRES**

Patent Applicant/Assignee:

GENICON SCIENCES CORPORATION,  
YGUERABIDE Juan,  
YGUERABIDE Evangelina E,  
KOHNE David E,  
JACKSON Jeffrey T,

Inventor(s):

YGUERABIDE Juan,  
YGUERABIDE Evangelina E,  
KOHNE David E,  
JACKSON Jeffrey T,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9920789 A1 19990429  
Application: WO 98US23160 19981016 (PCT/WO US9823160)  
Priority Application: US 97953713 19971017

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU  
IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL  
PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN YU GH GM KE LS MW SD  
SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE  
IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 81142

Fulltext Availability:

Detailed Description

Detailed Description

... microns in diameter that are  
filled with many highly fluorescent dye molecules as the  
analyte **tracer**, detecting the bound analytes by the  
fluorescent signal. The following excerpt is from this  
publication...critical angle.

Craig et al., U.S. Patent 4,480,042 describes use of  
high **refractive index** particle reagents in light scattering  
immunoassays. The preferred particles are composed of

12

Polymer materials...detection and  
measurement of the particles across wide concentration  
ranges; (5) the use of **refractive index** enhancement methods  
provides for enhancement of a particle's light scattering

21

properties, and/or microscopy, and reflection  
contrast and **differential interference contrast** microscopy.



14/3,K/1 (Item 1 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2005 WIPO/Univentio. All rts. reserv.

01064210 \*\*Image available\*\*

**SENSORS FOR BIOMOLECULAR DETECTION AND CELL CLASSIFICATION**  
**DETECTEURS POUR DETECTION BIOMOLECULAIRE ET CLASSIFICATION CELLULAIRE**

Patent Applicant/Inventor:

MOYLE William R, 952 River Road, Piscataway, NJ 08854, US, US (Residence)  
, US (Nationality)

RUSSELL C Scaduto Jr, 314 Scout Lane, Hummelstown, PA 17036, US, US  
(Residence), US (Nationality)

Legal Representative:

MUCCINO Richard R (agent), 758 Springfield Avenue, Summit, NJ 07901, US,  
Patent and Priority Information (Country, Number, Date):

Patent: WO 200393790 A2-A3 20031113 (WO 0393790)

Application: WO 2003US13538 20030430 (PCT/WO US03013538)

Priority Application: US 2002376312 20020430

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE

KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE

SG SK TJ TM TR TT UA UG US UZ VN

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE  
SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 19561

Fulltext Availability:

Detailed Description

Detailed Description

... detect the material, it is often most useful to perform the technique  
in an optical **microscope** . In cases where the background **fluorescence**  
that may be present in tissues and tissue sections is found to limit the  
sensitivity...

...that occurs when light reflects from the interface between two optical  
media that differ in **refractive index** . In TIRFM a beam of light is  
passed through a material of high **refractive index** (e.g., glass,  
fused silica, sapphire) such that it reaches an interface with a material  
of lower **refractive index** (e.g. aqueous solution, tissue section).  
When the angle of incidence is below a value...

...as the critical angle, all the light is reflected back into the material  
of high **refractive index** . A standing electromagnetic or "evanescent"  
wave will be generated at the interface. Its energy will...

...interface and will decay exponentially as a function of distance from  
the surface of higher **refractive index** , e.g., as the electromagnetic  
wave penetrates into an aqueous medium. The energy in the...

...surface or that are in close proximity (100-400 nm) to the surface of

high **refractive index** . The limited distance traveled by the evanescent wave is responsible for the ability of TWM...

...very near the

14

surface of the TIRFM sensor (i.e., the material of high **refractive index** ). As a consequence of the physical principle that underlies TIRFM, the unwanted background light that...

...the intrinsic fluorescence of tissue samples that is often a problem for other types of **fluorescent microscopy** is virtually eliminated. This high signal-to-noise ratio is responsible for the ability of TIRFM to detect and quantify **trace** amounts of material in the face of an overwhelming amount of non-specific contaminating debris...

14/3,K/2 (Item 2 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00934807 \*\*Image available\*\*

**METHODS FOR PROVIDING EXTENDED DYNAMIC RANGE IN ANALYTE ASSAYS**

**PROCEDES PERMETTANT D'ETENDRE L'ECHELLE DYNAMIQUE DANS DES DOSAGES D'ANALYTES**

Patent Applicant/Assignee:

GENICON SCIENCES CORPORATION, 11585 Sorrento Valley Road, San Diego, CA 92121, US, US (Residence), US (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

YGUERABIDE Juan, 9505 Poole Street, La Jolla, CA 92037, US, US (Residence), US (Nationality), (Designated only for: US)

YGUERABIDE Evangelina, 9505 Poole Street, La Jolla, CA 92037, US, US (Residence), US (Nationality), (Designated only for: US)

WARDEN Laurence, 12913 Camino Del Valle, Poway, CA 92064, US, US (Residence), US (Nationality), (Designated only for: US)

PETERSON Todd, 32 Catspaw Cape, Coronado, CA 92118, US, US (Residence), US (Nationality), (Designated only for: US)

Legal Representative:

CORUZZI Laura A (et al) (agent), Pennie & Edmonds LLP, 1155 Avenue of the Americas, New York, NY 10036, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200268932 A2-A3 20020906 (WO 0268932)

Application: WO 2002US5928 20020225 (PCT/WO US02005928)

Priority Application: US 2001271089 20010223

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI  
SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 95146

Fulltext Availability:  
Detailed Description

Detailed Description

... microns in diameter that are filled with many highly fluorescent dye molecules as the analyte **tracer**, detecting the bound analytes by the fluorescent signal. The following excerpt is from this publication... critical angle.

Craig et al., U.S. Patent 4,480,042 describes use of high **refractive index** particle reagents in light scattering immunoassays. The preferred particles are composed of polymer materials. The...i.e., incident light does not pass through an interface from a medium of higher **refractive index** to a medium of lower **refractive index** ).

21

Preferably the system also includes a sample array that includes a plurality of separately...for detection and measurement of the particles across

wide concentration ranges;

(5) the use of **refractive index** enhancement methods provides for enhancement of a particle's light scattering properties, and/or decreases ...a plurality of different wavelengths of light are used in the illumination or detection step; **refractive index** enhancement methods are used to red-Lice non-specific light background; the detector is placed...

14/3,K/3 (Item 3 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2005 WIPO/Univentio. All rts. reserv.

00795731 \*\*Image available\*\*

**DEPOSITION OF FILMS USING ORGANOSILSESQUIOXANE-PRECURSORS**

**DEPOT DE FILMS AU MOYEN DE PRECURSEURS D'ORGANOSILSESQUIOXANE**

Patent Applicant/Assignee:

ALLIEDSIGNAL INC, 101 Columbia Avenue, P.O. Box 2245, Morristown, NJ  
07960, US, US (Residence), US (Nationality)

Inventor(s):

HACKER Nigel P, 991 Lincoln Avenue, Palo Alto, CA 94201, US,

Legal Representative:

CRISS Roger H (et al) (agent), AlliedSignal Inc., 101 Columbia Road, P.O.  
Box 2245, Morristown, NJ 07960, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200129052 A1 20010426 (WO 0129052)

Application: WO 2000US28689 20001017 (PCT/WO US0028689)

Priority Application: US 99420218 19991018

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB  
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA  
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA  
UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English  
Fulltext Word Count: 10231

Fulltext Availability:  
Claims

Claim

... or in use. The invention is also comprehended for use with deposition methods that use **trace** amounts of a group VIII catalyst, such as Pt(acac)<sub>2</sub>, to further HSQ film...x-ray and neutron reflectivity, energy-dispersive x-ray reflectivity, total external reflectance x-ray **fluorescence** MeV ion scattering atomic force **microscopy** and ellipsometry. See, for example, Lin et al., Proc. A CS PMSE 77: 626 (1...  
  
...determined using commercially available instruments such as a Nanospec AFT. Correction of film thickness for **refractive index** is frequently desirable. **Refractive index** of thin films can be measured using an ellipsometer. Such devices are commercially available (Rudolph...

14/3,K/4 (Item 4 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2005 WIPO/Univentio. All rts. reserv.

00569877 \*\*Image available\*\*

**COMPUTERIZED ADAPTIVE IMAGING**  
**IMAGERIE ADAPTATIVE INFORMATISEE**

Patent Applicant/Assignee:

YEDA RESEARCH AND DEVELOPMENT CO LTD,  
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA,  
KAM Zvi,  
SEDAT John W,  
AGARD David A,  
HAUSER Bridget M,

Inventor(s):

KAM Zvi,  
SEDAT John W,  
AGARD David A,  
HAUSER Bridget M,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200033250 A2 20000608 (WO 0033250)  
Application: WO 99IL645 19991130 (PCT/WO IL9900645)  
Priority Application: IL 127359 19981201; US 99238225 19990127

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

CA IL JP US AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 6237

Fulltext Availability:  
Detailed Description

Detailed Description

... three-dimensional images.

In accordance with a preferred embodiment of the present invention, the

4

**ray tracer** and the deconvolver utilize the information relating to

the **refractive characteristics** in a three-dimensional imaged volume obtained from one of the three-dimensional images to...

...at least another one of the three-dimensional image or itself

The acquirer may obtain **refractive index** information from DIC, or from

**phase microscopy** or from **fluorescence** -for example in DNA associated stains wherein the stain intensity is proportional to the **refractive index** increment.

**Refractive index** mapping may be applied to samples whose refractive index is known. For example this may...

14/3,K/5 (Item 5 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2005 WIPO/Univentio. All rts. reserv.

00509064 \*\*Image available\*\*

**METHOD, APPARATUS AND FLOW CELL FOR HIGH SENSITIVITY DETECTION OF FLUORESCENT MOLECULES**

**PROCEDE, APPAREIL ET CUVE A CIRCULATION DESTINES A UNE DETECTION HAUTE PRECISION DE MOLECULES FLUORESCENTES**

Patent Applicant/Assignee:

A+ SCIENCE INVEST AB,

ERIKSSON Peter,

ORWAR Owe,

CHIU Daniel T,

Inventor(s):

ERIKSSON Peter,

ORWAR Owe,

CHIU Daniel T,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9940416 A1 19990812

Application: WO 99SE159 19990205 (PCT/WO SE9900159)

Priority Application: SE 98360 19980206

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES  
FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT  
LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR  
TT UA UG US UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU  
TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG  
CI CM GA GN GW ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 10325

Fulltext Availability:

Claims

Claim

... 14 shows the most preferred embodiment of the invention in which a scanning confocal **fluorescence microscope** (SCFM) is used.

Fig. 15 illustrates use of the flow cell according to the invention...of choice to remove soot

particles.

Since the present invention aims at applications where only **trace** amounts of materials are present, it is of utmost importance that the analytes do not...computer 14 to facilitate the data collection. The set-up is ideally mounted onto a **microscope** . In the figure, laser light exciting the **fluorescent** molecules is represented as open arrows 15, and fluorescent light from excited molecules is...for clarity reasons. The most preferred embodiment of the invention in which a scanning confocal **fluorescence microscope** (SCFM) is used, is illustrated in figure 14. The beam 3 from the laser 4...

...at least the constricted region thereof 2 is immersed in oil or water for better **refractive index** matching. The emitted fluorescence is collected by the objective 9 and directed onto a...

14/3,K/6 (Item 6 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00489437

**ANALYTE ASSAY USING PARTICULATE LABELS**

**TITRAGE D'ANALYTES UTILISANT DES MARQUEURS PARTICULAIRES**

Patent Applicant/Assignee:

GENICON SCIENCES CORPORATION,  
YGUERABIDE Juan,  
YGUERABIDE Evangelina E,  
KOHNE David E,  
JACKSON Jeffrey T,

Inventor(s):

YGUERABIDE Juan,  
YGUERABIDE Evangelina E,  
KOHNE David E,  
JACKSON Jeffrey T,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9920789 A1 19990429  
Application: WO 98US23160 19981016 (PCT/WO US9823160)  
Priority Application: US 97953713 19971017

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU  
IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL  
PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN YU GH GM KE LS MW SD  
SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE  
IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 81142

Fulltext Availability:

Detailed Description

Detailed Description

... microns in diameter that are filled with many highly fluorescent dye molecules as the analyte **tracer** , detecting the bound analytes by the

fluorescent signal. The following excerpt is from this publication...critical angle.

Craig et al., U.S. Patent 4,480,042 describes use of high **refractive index** particle reagents in light scattering immunoassays. The preferred particles are composed of

12

Polymer materials...detection and measurement of the particles across wide concentration ranges; (5) the use of **refractive index** enhancement methods provides for enhancement of a particle's light scattering

21

properties, and/or...86Sfl/,LJd 68LOV66 OM wavelengths of light are used in the illumination or detection step; **refractive index** enhancement methods are used to reduce non-specific light background; the detector is placed...of

combinatorial synthesized molecules is performed; particles and/or specialized coatings are used as solid- **phase** synthetic supports for combinatorial or other synthesized molecules; specially designed sample chambers are used; antireflective...methods of signal and target analyte amplification (e.g.

chemiluminescence and PCR), fluorescence labels and **fluorescence** methods, and previous particle-based assays and light scattering methods. The method is versatile and...be released into

solution by adjusting the pH, ionic strength, or other liquid property. Higher **refractive index** liquids can be added, and the particle light scattering properties are measured in solution. Similarlyf...

...into a small volume or area prior to measuring the light scattering properties.

Again, higher **refractive index** liquids can be added prior to the measurement.

Both theoretical evaluation and physical experimentation indicate...ranges of 300 to 700 nanometers (nm) . In these calculations, we have used values of **refractive index** vs.

wavelength tabulated in standard handbooks for different bulk materials in vacuum.

For some particle...the metal-like particles increases and the non-specific light scattering background decreases as the **refractive index** of the sample is increased. The largest increases in particle light scattering/non-specific scatter background ratio is achieved when the **refractive index** of the sample medium approaches the **refractive index** of the metal-like particle as demonstrated in Table 16. This means that at the proper medium **refractive index** values, the non-specific

96 light scatter from serum proteins or similar constituents

can be...

...ratios when the light scattering properties of metal-like particles are used as the analytical **tracer**. These methods can be applied to samples such as dry surfacesf surfaces covered by solutions...

14/3,K/7 (Item 7 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2005 WIPO/Univentio. All rts. reserv.

00399438

**ANALYTE ASSAY USING PARTICULATE LABELS**

**DETECTION D'ANALYTES A L'AIDE DE MARQUEURS PARTICULAIRES**

Patent Applicant/Assignee:

SPECTRAMETRIX INC,  
YGUERABIDE Evangelina E,  
KOHNE David E,  
JACKSON Jeffrey T,

Inventor(s):

YGUERABIDE Evangelina E,  
KOHNE David E,  
JACKSON Jeffrey T,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9740181 A1 19971030  
Application: WO 97US6584 19970417 (PCT/WO US9706584)  
Priority Application: US 9616383 19960425

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AT AU BR CA CH CN CZ DE DK ES FI GB HU IL IS JP KP KR LU MX NO NZ PL PT  
RO RU SE SG US AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 62569

Fulltext Availability:

Claims

Claim

... the light microscope. Thin section subjected to IGSS can also be viewed with the light **microscope**, especially by using **phase** contrast or epi-polarization illumination (Stierhof et al., 1992).11  
The method of silver enhancement...in diameter that are filled with many highly fluorescent dye molecules as 5 the analyte **tracer**, detecting the bound analytes by the f lucescent signal. The following excerpt is from this...critical angle. Craig et al., U.S. Patent 4,480,042 describes use of high **refractive index** particle reagents in light scattering immunoassays. The preferred particles are composed of polymer materials. The...

?



16/3,K/1 (Item 1 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2005 European Patent Office. All rts. reserv.

01402728

**Sampling probe**

**Probensonde**

**Sonde d'echantillonnage**

PATENT ASSIGNEE:

Symyx Technologies, Inc., (2846640), 3100 Central Expressway, Santa Clara, CA 95051, (US), (Applicant designated States: all)

INVENTOR:

Wang, Youqi, Symyx Technologies, Inc., 3100 Central Expressway, Santa Clara, California 95051, (US)

Cong, Peijun, Symyx Technologies, Inc., 3100 Central Expressway, Santa Clara, California 95051, (US)

Wheeler, Tony N., Symyx Technologies, Inc., 3100 Central Expressway, Santa Clara, California 95051, (US)

Van Erden, Lynn Thomas, Symyx Technologies, Inc., 3100 Central Expressway, Santa Clara, California 95051, (US)

Bergh, H. Sam, Symyx Technologies, Inc., 3100 Central Expressway, Santa Clara, California 95051, (US)

LEGAL REPRESENTATIVE:

Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721), Maximilianstrasse 58, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1186892 A2 020313 (Basic)  
EP 1186892 A3 040107

APPLICATION (CC, No, Date): EP 2001120094 010821;

PRIORITY (CC, No, Date): US 652489 000831

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G01N-035/10; G01N-001/00; B01J-019/00; H01J-049/04

ABSTRACT WORD COUNT: 129

NOTE:

Figure number on first page: 4

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
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CLAIMS A	(English)	200211	823
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SPEC A	(English)	200211	4617
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Total word count - document A	5440
-------------------------------	------

Total word count - document B	0
-------------------------------	---

Total word count - documents A + B	5440
------------------------------------	------

...SPECIFICATION in a change in the sample temperature and density which affect other properties of the **sample**. Photothermal spectrometers **measure** the changes in the **refractive index** of the **sample** resulting from exciting it with radiation. One such photothermal spectrometer is described in U.S. Patent No. 6,087,181, issued July 11, 2000, entitled, "Sampling and Detection of **Trace** Gas Species by Optical Spectrography", which is hereby incorporated by reference.  
Conventional sampling probes used...

16/3,K/2 (Item 2 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2005 European Patent Office. All rts. reserv.

00972544

**Liquid crystal display device**

**Flussigkristallanzeigevorrichtung**

**Dispositif d'affichage a cristaux liquides**

PATENT ASSIGNEE:

Nippon Mitsubishi Oil Corporation, (2756544), 1-3-12, Nishi-Shimbashi,  
Minato-ku, Tokyo, (JP), (Proprietor designated states: all)

INVENTOR:

.Yoda, Eiji, 1-29-2-143 Higashi-Nagatani, Konan-ku, Yokohama-shi, Kanagawa  
, (JP)

Kaminade, Tadahiro, 3-35-3 Okubo, Konan-ku, Yokohama-shi, Kanagawa, (JP)

Toyooka, Takehiro, 1-29-3-223 Higashi-Nagatani, Konan-ku, Yokohama-shi,  
Kanagawa, (JP)

Matsumoto, Takuya, 30-2 Honmoku-Osatocho, Naka-ku, Yokohama-shi, Kanagawa  
, (JP)

LEGAL REPRESENTATIVE:

Colmer, Stephen Gary et al (29513), Mathys & Squire 100 Gray's Inn Road,  
London WC1X 8AL, (GB)

PATENT (CC, No, Kind, Date): EP 881522 A1 981202 (Basic)

EP 881522 B1 020227

APPLICATION (CC, No, Date): EP 98304245 980529;

PRIORITY (CC, No, Date): JP 97142475 970530

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G02F-001/1335

ABSTRACT WORD COUNT: 217

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	199849	264
CLAIMS B	(English)	200209	463
CLAIMS B	(German)	200209	387
CLAIMS B	(French)	200209	472
SPEC A	(English)	199849	13207
SPEC B	(English)	200209	13338
Total word count - document A			13474
Total word count - document B			14660
Total word count - documents A + B			28134

...SPECIFICATION were subjected to a heat treatment at 230(degree)C for 30 min. Thus obtained **specimen** film was subjected to **refractive index measurement** and a polarization analysis. As a result of the refractive index measurement, refractive indexes on...

...rotation method, a director was inclined in the vicinity of the substrate interfaces at a **trace** of angle. The angle of the director to a substrate surface was about 3 degrees...

...SPECIFICATION were subjected to a heat treatment at 230(degree)C for 30 min. Thus obtained **specimen** film was subjected to **refractive index measurement** and a polarization analysis. As a result of the refractive index measurement, refractive indexes on...

...rotation method, a director was inclined in the vicinity of the substrate interfaces at a **trace** of angle. The angle of the director to a substrate surface was about 3 degrees...

16/3,K/3 (Item 3 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2005 European Patent Office. All rts. reserv.

00230308

**Diagnostic method for diseases having an arthritic component.**  
**Verfahren zur Diagnose von Krankheiten mit einer arthritischen Komponente.**  
**Procede de diagnostic de maladies ayant un composant arthritique.**  
PATENT ASSIGNEE:

Monsanto Company, (201270), Patent Department 800 North Lindbergh  
Boulevard, St. Louis Missouri 63167-7020, (US), (applicant designated  
states: AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)

INVENTOR:

Dwek, Raymond A. Dep. of Biochemistry, University of Oxford South Parks  
Road, Oxford OX1 3QU, (GB)  
Rademacher, Thomas W. Dep. of Biochemistry, University of Oxford South  
Parks Road, Oxford OX1 3QU, (GB)

LEGAL REPRESENTATIVE:

Ernst, Hubert et al (464), Monsanto Services International S.A. Avenue de  
Tervuren 270/272, B-1150 Brussels, (BE)

PATENT (CC, No, Kind, Date): EP 189388 A2 860730 (Basic)  
EP 189388 A3 881130  
EP 189388 B1 920722

APPLICATION (CC, No, Date): EP 86870007 860121;

PRIORITY (CC, No, Date): US 693075 850122

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: C12Q-001/54; G01N-033/66; G01N-033/50;

ABSTRACT WORD COUNT: 65

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	68
CLAIMS B	(German)	EPBBF1	59
CLAIMS B	(French)	EPBBF1	80
SPEC B	(English)	EPBBF1	4786
Total word count - document A			0
Total word count - document B			4993
Total word count - documents A + B			4993

...SPECIFICATION time after removal of stochastic noise using Fourier  
transform techniques. The numerical superscripts above the **trace** refer  
to the elution position of glucose oligomers in glucose units (g.u.) as  
detected simultaneously by the **refractive index monitor**. Vo is the  
void position. **Sample** elution positions (in g.u.) were calculated by  
cubic spline interpolation between the internal standard...

16/3,K/4 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2005 WIPO/Univentio. All rts. reserv.

00893201 \*\*Image available\*\*

**REFRACTOMETER FOR MONITORING WATER CONTENT IN FLUIDS**

**REFRACTOMETRE DESTINE A SURVEILLER LA TENEUR EN EAU DANS DES FLUIDES**

Patent Applicant/Assignee:

LEICA MICROSYSTEMS INC, 3362 Walden Avenue, Buffalo, NY 14240, US, US

(Residence), US (Nationality)

Inventor(s):

COTTON Christopher T, 2 Stony Ridge Drive, Honeoye Falls, NY 14472, US,  
SABIN Jeffrey M, 424 Burt Circle, Lewiston, NY 14092, US,  
RYAN Thomas E, 12 Woodland Drive, Batavia, NY 14020, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200227299 A2-A3 20020404 (WO 0227299)  
Application: WO 2001IB1749 20010924 (PCT/WO IB0101749)  
Priority Application: US 2000676836 20000929

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

CA CN JP

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

Publication Language: English

Filing Language: English

Fulltext Word Count: 7970

Fulltext Availability:

Detailed Description

Detailed Description

... at a store, then an absolute refractive index of a pure, undiluted brake fluid was **measured**. After that, **refractive indices** of diluted 25 **samples** of brake fluids were **determined**. In all **measurements** the **refractive indices** were **measured** on a NIST **Traceable** laboratory refractometer. The percentage of water in the samples were determined by the Karl Fisher...

16/3,K/5 (Item 2 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2005 WIPO/Univentio. All rts. reserv.

00732584

**BRAKE CHECK HANDHELD REFRACTOMETER**

**REFRACTOMETRE PORTATIF POUR CONTROLE DES FREINS**

Patent Applicant/Assignee:

LEICA MICROSYSYSTEMS INC, P.O. Box 123, Buffalo, NY 14240-0123, US, US  
(Residence), US (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

COTTON Christopher T, 2 Stony Ridge Drive, Honeoye Falls, NY 14472, US,  
US (Residence), US (Nationality), (Designated only for: US )  
SABIN Jeffrey M, 424 Burt Circle, Lewiston, NY 14092, US, US (Residence),  
US (Nationality), (Designated only for: US )  
RYAN Thomas E, 12 Woodland Drive, Batavia, NY 14020, US, US (Residence),  
US (Nationality), (Designated only for: US )

Legal Representative:

VIKSINNS Ann S, Schwegman, Lundberg, Woessner & Kluth, P.O. Box 2938,  
Minneapolis, MN 55402, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200045150 A2 20000803 (WO 0045150)  
Application: WO 2000US2304 20000128 (PCT/WO US0002304)  
Priority Application: US 99238547 19990128

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB

GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA  
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA  
UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 13074

Fulltext Availability:

Detailed Description

Detailed Description

... at a store, then an absolute refractive  
index of a pure, undiluted brake fluid was measured .

After that, refractive indices of diluted samples of  
brake fluids were determined . In all measurements the  
refractive indices were measured on a NIST Traceable  
laboratory refractometer. The percentage of water in the  
samples were determined by the Karl Fisher...

16/3,K/6 (Item 3 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2005 WIPO/Univentio. All rts. reserv.

00475466 \*\*Image available\*\*

**BRAKE CHECK HANDHELD REFRACTOMETER**

**REFRACTOMETRE MANUEL DE VERIFICATION DE FLUIDES DE FREINAGE**

Patent Applicant/Assignee:

LEICA MICROSYSTEMS INC,

Inventor(s):

COTTON Christopher T,

SABIN Jeffrey M,

RYAN Thomas E,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9906818 A1 19990211

Application: WO 98US15084 19980721 (PCT/WO US9815084)

Priority Application: US 9754330 19970731; US 9897368 19980615

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU  
IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL  
PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN YU ZW GH GM KE LS MW SD  
SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE  
IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 9478

Fulltext Availability:

Detailed Description

Detailed Description

... at a store, then an absolute refractive  
index of a pure, undiluted brake fluid was measured .

After that, **refractive indices** of diluted **samples** of brake fluids were **determined**. In all **measurements** the **refractive indices** were **measured** on a NIST **Traceable** laboratory refractometer. The percentage of water in the samples were determined by the Karl Fisher...

?

19/3,K/1 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2005 WIPO/Univentio. All rts. reserv.

01018850 \*\*Image available\*\*

**APPARATUS AND PROCESS FOR CHARACTERISING SAMPLES**  
**APPAREIL ET PROCEDE DE CARACTERISATION D'ECHANTILLONS**

Patent Applicant/Assignee:

UNIVERSITE LIBRE DE BRUXELLES, Avenue F.D. Roosevelt 50 CP 165, B-1050  
Brussels, BE, BE (Residence), BE (Nationality), (For all designated  
states except: US)

Patent Applicant/Inventor:

JOANNES Luc, Rue du Petit Ry 13, B-5030 Sauveniere, BE, BE (Residence),  
BE (Nationality), (Designated only for: US)

Legal Representative:

VAN MALDEREN Joelle (et al) (agent), Office Van Malderen, Place Reine  
Fabiola 6/1, B-1083 Brussels, BE,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200348837 A2-A3 20030612 (WO 0348837)

Application: WO 2002BE184 20021205 (PCT/WO BE0200184)

Priority Application: EP 2001870270 20011205

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG  
SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SI SK  
TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 4399

Fulltext Availability:

Detailed Description

Detailed Description

... converted in beam deviation angle.

[00561 Concretely, for example, the implementation  
of the process for **determining** the variations of the  
**refraction index** in a **sample** volume using the apparatus  
according to the present invention comprises the step of  
**acquiring** a set of **images** (at least 3) with a

?

22/3,K/1 (Item 1 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2005 European Patent Office. All rts. reserv.

01884676

**Apparatus coupling an interferometer and a microscope**  
**Vorrichtung die ein Mikroskop mit einem Interferometer kombiniert**  
**Appareil associant un interferometre et un microscope**  
PATENT ASSIGNEE:

UNIVERSITE LIBRE DE BRUXELLES, (939736), Avenue Franklin Roosevelt 55, CP  
161, 1050 Bruxelles, (BE), (Applicant designated States: all)

INVENTOR:

Dubois, Frank, Rue du Lorient, 15, 1170 Brussels, (BE)  
Yourassowsky, Catherine, Rue du Lorient, 15, 1170 Brussels, (BE)

LEGAL REPRESENTATIVE:

Van Malderen, Joelle et al (75971), Office Van Malderen, Place Reine  
Fabiola 6/1, 1083 Bruxelles, (BE)

PATENT (CC, No, Kind, Date): EP 1524491 A1 050420 (Basic)

APPLICATION (CC, No, Date): EP 2003447256 031016;

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;  
HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK

INTERNATIONAL PATENT CLASS: G01B-009/02

ABSTRACT WORD COUNT: 204

NOTE:

Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200516	991
SPEC A	(English)	200516	9124
Total word count - document A			10115
Total word count - document B			0
Total word count - documents A + B			10115

...SPECIFICATION said apparatus or said process, namely in differential  
contrast microscopy and/or in digital holographic microscopy , and  
namely in digital fluorescence holography, and/or for the measurement  
of micro- distributions of refractive index inside a sample .

Short description of the drawings

Fig.1 corresponds to a schematic representation of an apparatus...

22/3,K/2 (Item 2 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2005 European Patent Office. All rts. reserv.

01753319

**Planar light source and display device using the same**  
**Planare Lichtquelle und diese verwendende Anzeigevorrichtung**  
**Source lumineuse plane et dispositif d'affichage l'utilisant**  
PATENT ASSIGNEE:

NITTO DENKO CORPORATION, (301873), 1-2, Shimohozumi 1-chome Ibaraki-shi,  
Osaka, (JP), (Applicant designated States: all)

INVENTOR:

Nakamura, Toshitaka, Nitto Denko Corporation, 1-2, Shimohozumi 1-chome,  
Ibaraki-shi Osaka, (JP)



Miyatake, Minoru, Nitto Denko Corporation, 1-2, Shimohozumi 1-chome,  
Ibaraki-shi Osaka, (JP)

LEGAL REPRESENTATIVE:

Grunecker, Kinkeldey, Stockmair & Schwanhauser Anwaltssozietat (100721)  
, Maximilianstrasse 58, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1434283 A2 040630 (Basic)

APPLICATION (CC, No, Date): EP 2003029942 031229;

PRIORITY (CC, No, Date): JP 2002377141 021226

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;  
HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK

INTERNATIONAL PATENT CLASS: H01L-051/20

ABSTRACT WORD COUNT: 115

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200427	597
SPEC A	(English)	200427	12023
Total word count - document A			12620
Total word count - document B			0
Total word count - documents A + B			12620

...SPECIFICATION DELTA)n1 of 0.23 and (DELTA)n2 and (DELTA)n3 of 0.029 as  
**refractive index** difference. For the **measurement** of **refractive**  
**index** difference, a **sample** obtained by stretching a norbornene-based  
resin alone under the same conditions as mentioned above...

...microregions (domain of liquid crystal polymer) was measured by color  
developed on the basis of **phase** difference by observation under  
polarization **microscope** . As a result, the length of the microregion in  
(DELTA)n1 was found to be...

22/3,K/3 (Item 1 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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01178850 \*\*Image available\*\*

DIGITAL HOLOGRAPHIC MICROSCOPE FOR 3D IMAGING AND PROCESS USING IT

MICROSCOPE HOLOGRAPHIQUE NUMERIQUE POUR IMAGERIE 3D ET PROCEDE L'UTILISANT

Patent Applicant/Assignee:

UNIVERSITE LIBRE DE BRUXELLES, Avenue F.D. Roosevelt 50 CP 161, B-1050  
BRUSSELS, BE, BE (Residence), BE (Nationality), (For all designated  
states except: US)

Patent Applicant/Inventor:

DUBOIS Frank, Rue du Lorient 15, B-1170 BRUSSELS, BE, BE (Residence), BE  
(Nationality), (Designated only for: US)

YOURASSOWSKY Catherine, Rue du Lorient 15, B-1170 BRUSSELS, BE, BE  
(Residence), BE (Nationality), (Designated only for: US)

Legal Representative:

VAN MALDEREN Joelle (et al) (agent), OFFICE VAN MALDEREN, Place Reine  
Fabiola 6/1, B-1083 BRUSSELS, BE,

Patent and Priority Information (Country, Number, Date):

Patent: WO 2004102111 A1 20041125 (WO 04102111)

Application: WO 2004BE75 20040517 (PCT/WO BE04000075)

Priority Application: EP 2003447111 20030516; EP 2003447256 20031016

Designated States:

(All protection types applied unless otherwise stated - for applications 2004+)

AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM  
DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC  
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO  
RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PL PT RO  
SE SI SK TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 12224

Fulltext Availability:

Detailed Description

Detailed Description

... a  
rotating plate.

[00511 The present invention is also related to the  
use of said **microscope** or said process.

. to study **fluorescent** and/or thick samples;  
- in differential contrast **microscopy** ;  
- in vivo 3D imaging applications;  
to **measure** three-dimensional micro- **distributions** of  
**refractive indexes** in a **sample** ;  
and to study fast phenomena.

Definitions.

[00521 Reference is made to the section entitled  
"State...

?

? t/3,k/all

25/3,K/1 (Item 1 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2005 European Patent Office. All rts. reserv.

01930027

Secure transaction management

Verfahren und Vorrichtung zur gesicherten Transaktionsverwaltung

Procede et dispositif de gestion de transactions securisees

PATENT ASSIGNEE:

Intertrust Technologies Corp., (2434323), 955 Stewart Drive, Sunnyvale,  
CA 94085, (US), (Applicant designated States: all)

INVENTOR:

Ginter, Karl L., 10404 43rd Avenue, Beltsville, MD 20705, (US)

Spahn, Francis J., 2410 Edwards Avenue, El Cerrito, CA 94530, (US)

Shear, Victor H., 5203 Battery Lane, Bethesda, MD 20814, (US)

Van Wie, David M., 1250 Lakeside Drive, Sunnyvale, CA 94086, (US)

LEGAL REPRESENTATIVE:

Beresford, Keith Denis Lewis (28273), BERESFORD & Co. 16 High Holborn,  
London WC1V 6BX, (GB)

PATENT (CC, No, Kind, Date): EP 1555591 A2 050720 (Basic)

APPLICATION (CC, No, Date): EP 2005075672 960213;

PRIORITY (CC, No, Date): US 388107 950213

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC;  
NL; PT; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 861461 (EP 96922371)

INTERNATIONAL PATENT CLASS: G06F-001/00; G06F-017/60

ABSTRACT WORD COUNT: 147

NOTE:

Figure number on first page: NONE

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200529	1002
SPEC A	(English)	200529	194028
Total word count - document A			195030
Total word count - document B			0
Total word count - documents A + B			195030

...SPECIFICATION secure database 610. Object repository 728 may store,  
provide access to, and/or maintain VDE **objects** 300.

Figure 12 also shows that ROS 602 may provide one or more SPEs 503...  
Secure Database Manager RSI 744a.

Name Services Manager 752

The Name Services Manager 752 supports **three** subservices: user name  
services, host name services, and services name services. User name  
services provides...may include a channel ID field 597(1), a user ID  
field 597(2), an **object** ID field 597( 3 ), a field containing a  
reference or other identification to a "right" (i.e., a collection...

25/3,K/2 (Item 2 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2005 European Patent Office. All rts. reserv.

01888484

**Systems and methods for secure transaction management and electronic rights protection**

**Systeme und Verfahren zur gesicherten Transaktionsverwaltung und elektronischem Rechtsschutz**

**Systemes et procedes de gestion de transactions securisees et de protection de droits electroniques**

PATENT ASSIGNEE:

ELECTRONIC PUBLISHING RESOURCES, INC., (976840), 460 Oakmead Parkway, Sunnyvale, CA 94086-4708, (US), (Applicant designated States: all)

INVENTOR:

Ginter, Karl L., 10404 43rd Avenue, Beltsville, Maryland 20705, (US)

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Spahn, Francis J., 2410 Edwards Avenue, El Cerrito, California 94530, (US)

Van Wie, David M., 1780 East 25th Avenue, Eugene, OR 97403, (US)

LEGAL REPRESENTATIVE:

Smith, Norman Ian et al (36041), fJ CLEVELAND 40-43 Chancery Lane, London WC2A 1JQ, (GB)

PATENT (CC, No, Kind, Date): EP 1526472 A2 050427 (Basic)

APPLICATION (CC, No, Date): EP 2004078254 960213;

PRIORITY (CC, No, Date): US 388107 950213

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 861461 (EP 96922371)

INTERNATIONAL PATENT CLASS: G06F-017/60; G06F-009/46

ABSTRACT WORD COUNT: 151

NOTE:

Figure number on first page: 75

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200517	355
SPEC A	(English)	200517	167222
Total word count - document A			167577
Total word count - document B			0
Total word count - documents A + B			167577

...SPECIFICATION may include a channel ID field 597(1), a user ID field 597(2), an **object** ID field 597( 3 ), a field containing a reference or other identification to a "right" (i.e., a collection...

**25/3,K/3 (Item 3 from file: 348)**

DIALOG(R)File 348:EUROPEAN PATENTS

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00711606

**Start code detector for image sequences**

**Detektor fur den Startcode von Bildsequenzen**

**Detecteur de code de depart pour sequences d'images**

PATENT ASSIGNEE:

DISCOVISION ASSOCIATES, (260273), 2355 Main Street Suite 200, Irvine, CA 92714, (US), (Proprietor designated states: all)

INVENTOR:

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Robbins, William Philip, 19 Springhill, Cam, Gloucestershire GL11 5PE,  
(GB)  
Finch, Helen Rosemary, Tyley, Coombe, Wotton-Under-Edge, Gloucester. GL12  
7ND, (GB)  
Boyd, Kevin James, 21 Lancashire Road, Bristol BS7 9DL, (GB)

LEGAL REPRESENTATIVE:

Vuillermoz, Bruno et al (72791), Cabinet Laurent & Charras B.P. 32 20,  
rue Louis Chirpaz, 69131 Ecully Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 674443 A2 950927 (Basic)  
EP 674443 A3 951213  
EP 674443 A3 981223  
EP 674443 B1 010509

APPLICATION (CC, No, Date): EP 95301301 950228;

PRIORITY (CC, No, Date): GB 9405914 940324

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IE; IT; LI; NL

RELATED DIVISIONAL NUMBER(S) - PN (AN):

EP 891089 (EP 98202149)  
(EP 98202154)  
EP 884910 (EP 98202132)  
EP 891088 (EP 98202133)  
EP 897244 (EP 98202134)  
EP 901286 (EP 98202135)  
EP 901287 (EP 98202166)  
EP 896473 (EP 98202170)  
EP 896474 (EP 98202171)  
EP 896476 (EP 98202174)  
EP 896475 (EP 98202172)

INTERNATIONAL PATENT CLASS: H04N-007/24; G06F-013/00; G06F-009/38

ABSTRACT WORD COUNT: 102

NOTE:

Figure number on first page: 61

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB95	2897
CLAIMS B	(English)	200119	647
CLAIMS B	(German)	200119	609
CLAIMS B	(French)	200119	752
SPEC A	(English)	EPAB95	128616
SPEC B	(English)	200119	122384
Total word count - document A			131543
Total word count - document B			124392
Total word count - documents A + B			255935

...SPECIFICATION it is the combination of the parser state machine and Huffman decoder together that contain **information** within them.

Regarding the Spatial Decoder of the present invention, the address generation is modified...Token

The DATA Token carries data from one processing stage to the next. Consequently, the **characteristics** of this Token change as it passes through the decoder. Furthermore, the meaning of the...their respective worst case  $V(\text{sub}(\text{DD}))$ .  $V(\text{sub}(\text{DD}))=5.0(+/-)0.25\text{V}$ . (see **image** in original document)

A.4.7 Control clock

In general, the clock controlling the transfers...

25/3,K/4 (Item 4 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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00306062

Digital data processing system.

Digitales Datenverarbeitungssystem.

Système du traitement de données numériques.

PATENT ASSIGNEE:

DATA GENERAL CORPORATION, (410940), Route 9, Westboro Massachusetts 01581  
, (US), (applicant designated states: AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)  
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LEGAL REPRESENTATIVE:

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London WC1X 8PL, (GB)

PATENT (CC, No, Kind, Date): EP 300516 A2 890125 (Basic)  
EP 300516 A3 890426  
EP 300516 B1 931124

APPLICATION (CC, No, Date): EP 88200921 820521;

PRIORITY (CC, No, Date): US 266413 810522; US 266539 810522; US 266521  
810522; US 266415 810522; US 266409 810522; US 266424 810522; US 266421  
810522; US 266404 810522; US 266414 810522; US 266532 810522; US 266403  
810522; US 266408 810522; US 266401 810522; US 266524 810522

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 67556 (EP 823025960)

INTERNATIONAL PATENT CLASS: G06F-009/46; G06F-012/14;

ABSTRACT WORD COUNT: 122

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	1018
CLAIMS B	(German)	EPBBF1	868
CLAIMS B	(French)	EPBBF1	1115
SPEC B	(English)	EPBBF1	154256
Total word count - document A			0
Total word count - document B			157257
Total word count - documents A + B			157257

...SPECIFICATION relates to a digital computer processing system of the  
kind set forth in the pre- **characterising** part of claim 1.

A general trend in the development of data processing systems has...

...invisible to users, and provides a flexible and simplified interface to

users. The data processing **system** provides an addressing mechanism allowing permanent and unique identification of all information generated for use...SUBSYSTEMS (Figs. 201-206, 207-274)

Having previously described the overall structure and operation of CS 10110, the structure and operation of CS 10110's major subsystems will next be individually...

**25/3,K/5 (Item 5 from file: 348)**

DIALOG(R) File 348:EUROPEAN PATENTS

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00306058

**Digital data processing system.**

**Digitales Datenverarbeitungssystem.**

**Systeme de traitement de donnees numeriques.**

**PATENT ASSIGNEE:**

DATA GENERAL CORPORATION, (410940), Route 9, Westboro Massachusetts 01581  
, (US), (applicant designated states: AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)

**INVENTOR:**

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(US)

Gavrin, Edward S., Beaver Pond Road RFD 4, Lincoln Massachusetts 01773,  
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Jones, Thomas M. Jones, 300 Reade Road, Chapel Hill North Carolina 27514,  
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Wallach, Walter, A., Jr., 1336 Medfield Road, Raleigh North Carolina  
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Robson, Aidan John et al (69471), Reddie & Grose 16 Theobalds Road,  
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**PATENT (CC, No, Kind, Date):** EP 290111 A2 881109 (Basic)

EP 290111 A3 890503

EP 290111 B1 931222

**APPLICATION (CC, No, Date):** EP 88200917 820521;

**PRIORITY (CC, No, Date):** US 266404 810522

**DESIGNATED STATES:** AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

**RELATED PARENT NUMBER(S) - PN (AN):**

EP 67556 (EP 823025960)

**INTERNATIONAL PATENT CLASS:** G06F-009/30;

**ABSTRACT WORD COUNT:** 123

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	1044
CLAIMS B	(German)	EPBBF1	890
CLAIMS B	(French)	EPBBF1	1185
SPEC B	(English)	EPBBF1	154314
Total word count - document A			0
Total word count - document B			157433
Total word count - documents A + B			157433

...SPECIFICATION of providing a simple and flexible interface user interface to a data processing system. The **character** of user's interface to a data procesing system is determined, in part, by the...

...et al.

The object of the present invention is to provide a digital computer system **with** improved means for implementing an object based architecture and unique identifier codes.

The invention is...of arguments is accomplished through the calling and called procedure's Name Tables 10350. In **illustration** , a procedure W(a,b,c) may wish to pass arguments a, b, and c...

25/3,K/6 (Item 1 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00909145 \*\*Image available\*\*

**PLANAR LASER ILLUMINATION AND IMAGING (PLIIM) SYSTEMS WITH INTEGRATED DESPECKLING MECHANISMS PROVIDED THEREIN**  
**SYSTEMES PLIIM D'ILLUMINATION ET D'IMAGERIE AU LASER PLANAIRE A MECANISME DE DECHATOIEMENT INTEGRE**

Patent Applicant/Assignee:

METROLOGIC INSTRUMENTS INC, 90 Coles Road, Blackwood, NJ 08012, US, US  
(Residence), US (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

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GHOSH Sankar, Apartment #B27, 100 W. Oadk Lane, Glenolden, PA 19036, US,  
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, US (Nationality), (Designated only for: US)

AMUNDSEN Thomas, 620 Glen Court, Turnersville, NJ 08012, US, US



transmittivity of...pattern samples which need to be generated per each photo-integration time interval of the **image** detection array can be experimentally determined without undue experimentation. However, for a particular degree of...

25/3,K/7 (Item 2 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00784185 \*\*Image available\*\*

**A SYSTEM AND METHOD FOR STREAM-BASED COMMUNICATION IN A COMMUNICATION SERVICES PATTERNS ENVIRONMENT**

**SYSTEME, PROCEDE ET ARTICLE DE PRODUCTION FOURNISSANT UN SYSTEME DE COMMUNICATION EN CONTINU DANS UN ENVIRONNEMENT DE CONFIGURATIONS DE SERVICES DE COMMUNICATION**

Patent Applicant/Assignee:

ACCENTURE LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US

(Residence), US (Nationality)

Inventor(s):

BOWMAN-AMUAH Michel K, 6426 Peak Vista Circle, Colorado Springs, CO 80918, US,

Legal Representative:

HICKMAN Paul L (agent), Hickman Coleman & Hughes, LLP, P.O. Box 52037, Palo Alto, CA 94303-0746, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200117195 A2-A3 20010308 (WO 0117195)

Application: WO 2000US24125 20000831 (PCT/WO US0024125)

Priority Application: US 99386717 19990831

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE  
ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT  
LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM  
TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 150532

Fulltext Availability:

Detailed Description

Detailed Description

... to help full-text index Web sites.

Fulcrum - provides a variety of robust, multi-platform **indexing** and retrieval products that deliver full-function text retrieval capabilities. Fulcrums products are typically integrated...2) business logic can be stored on the server(s) and executed on the client; ( 3 ) business logic can be stored and executed, on the client; (4) some business logic can...

25/3,K/8 (Item 3 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT  
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00764915

**IMAGE MAKING MEDIUM**

**SUPPORT DE FORMATION D'IMAGE**

Patent Applicant/Inventor:

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Legal Representative:

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York, NY 10036, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200077085 A1 20001221 (WO 0077085)

Application: WO 2000US16111 20000612 (PCT/WO US0016111)

Priority Application: US 99138694 19990611

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES  
FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU  
LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT  
TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 205520

Fulltext Availability:

Detailed Description

Detailed Description

... the paint's fat content and its permanence. Paint manufacturers  
generally do not provide this **information** . Thus, while two paints may  
look the same, e.g., with the same hue, value...As another example, one or  
more ingredients used in cPRM might be chosen for their **refractive**  
**index** , percentage of light transmission, percentage of haze they allow,  
coloration such as for their yellowness...

...a monomer and a catalyst used in a cPRM might be chosen principally for  
the **refractive index** of the resultant polymer.

According to the manufacturers of their active ingredients, some polymers  
of the present invention have a **refractive index** that is similar to,  
the same as, or even higher than that of some kinds...such active  
ingredients and such polymers might be used in inventive images for their  
low **refractive index** , for their low percentage of light transmission,  
for their high rate of haze, for their...these to an inventive image,  
e.g., to add pigment, particles of mica or glass, **refractive** inlays,  
pieces of silver leaf or wire, cut-outs, etc. One or more solvents might

...

?

26/3,K/1 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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01046991 \*\*Image available\*\*

**AUTO-FOCUSING METHOD AND DEVICE**

**PROCEDE ET DISPOSITIF D'AUTO-FOCALISATION**

Patent Applicant/Assignee:

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(Nationality), (For all designated states except: US)

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200377008 A2-A3 20030918 (WO 0377008)

Application: WO 2003IL206 20030313 (PCT/WO IL0300206)

Priority Application: IL 148664 20020313

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL PT RO RU SC SD SE  
SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE  
SI SK TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 12657

Patent Applicant/Inventor:

**KAM Zvi** ...

Fulltext Availability:

Detailed Description

Detailed Description

... assembly, and  $NA = n(\sin\theta)$  is the numerical aperture of the objective,  
n being the **index** of **refraction** of the environment E in front of the  
objective  
j  
(e.g., air...The fraction of light reflected at an interface is 30  
proportional to the difference in **refractive indices** of the two media  
at opposite - 19 sides of the interface, which is about 4...S1 and S2,  
since these surfaces are the only two boundaries of change in the **index**  
of **refraction** in the path of laser light L3 towards the specimen. It  
should be understood that...

26/3,K/2 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00569877      \*\*Image available\*\*

**COMPUTERIZED ADAPTIVE IMAGING  
IMAGERIE ADAPTATIVE INFORMATISEE**

Patent Applicant/Assignee:

YEDA RESEARCH AND DEVELOPMENT CO LTD,  
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA,  
KAM Zvi,  
SEDAT John W,  
AGARD David A,  
HAUSER Bridget M,

Inventor(s):

**KAM Zvi** ,  
SEDAT John W,  
AGARD David A,  
HAUSER Bridget M

Patent and Priority Information (Country, Number, Date):

Patent:                      WO 200033250 A2 20000608 (WO 0033250)  
Application:                WO 99IL645 19991130 (PCT/WO IL9900645)  
Priority Application: IL 127359 19981201; US 99238225 19990127

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

CA IL JP US AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 6237

Inventor(s):

**KAM Zvi** ...

Fulltext Availability:

Detailed Description  
Claims

English Abstract

...adaptive imaging comprises the following: an image information acquirer, which provides information relating to the **refractive characteristics** in a three-dimensional imaged volume; a ray tracer, which uses the information relating to the **refractive characteristics** to trace a multiplicity of rays from a multiplicity of locations in the three-dimensional...

...spread function, to provide an output image corrected for distortions due to variations in the **refractive characteristics** in the three-dimensional imaged volume.

Detailed Description

... Processing". Prentice-Hall Inc. Englewood Cliffs, New Jersey. (1979).

Imaging which provides information relating to **refractive characteristics** in a imaged volume is known for extremely limited applications. In microscopy, Smith, Nomarski and...

...method of line displacement, and Gouy interference method all developed for determination of one dimensional **refractive index** variations.

Computer analysis of DIC imaging is not readily achieved. Known instances are described in...

...is extremely well developed, but is not well known in the environment of

13/3,K/1 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2005 WIPO/Univentio. All rts. reserv.

00934807 \*\*Image available\*\*

**METHODS FOR PROVIDING EXTENDED DYNAMIC RANGE IN ANALYTE ASSAYS**  
**PROCEDES PERMETTANT D'ETENDRE L'ECHELLE DYNAMIQUE DANS DES DOSAGES**  
**D'ANALYTES**

Patent Applicant/Assignee:

GENICON SCIENCES CORPORATION, 11585 Sorrento Valley Road, San Diego, CA  
92121, US, US (Residence), US (Nationality), (For all designated states  
except: US)

Patent Applicant/Inventor:

YGUERABIDE Juan, 9505 Poole Street, La Jolla, CA 92037, US, US  
(Residence), US (Nationality), (Designated only for: US)  
YGUERABIDE Evangelina, 9505 Poole Street, La Jolla, CA 92037, US, US  
(Residence), US (Nationality), (Designated only for: US)  
WARDEN Laurence, 12913 Camino Del Valle, Poway, CA 92064, US, US  
(Residence), US (Nationality), (Designated only for: US)  
PETERSON Todd, 32 Catspaw Cape, Coronado, CA 92118, US, US (Residence),  
US (Nationality), (Designated only for: US)

Legal Representative:

CORUZZI Laura A (et al) (agent), Pennie & Edmonds LLP, 1155 Avenue of the  
Americas, New York, NY 10036, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200268932 A2-A3 20020906 (WO 0268932)  
Application: WO 2002US5928 20020225 (PCT/WO US02005928)  
Priority Application: US 2001271089 20010223

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI  
SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 95146

Fulltext Availability:

Detailed Description

Detailed Description

... microns in diameter that are filled with many highly fluorescent dye  
molecules as the analyte **tracer**, detecting the bound analytes by the  
fluorescent signal. The following excerpt is from this publication...  
critical angle.

Craig et al., U.S. Patent 4,480,042 describes use of high **refractive**  
**index** particle reagents in light scattering immunoassays. The preferred  
particles are composed of polymer materials. The...for detection and  
measurement of the particles across  
wide concentration ranges;

(5) the use of **refractive index** enhancement methods provides for  
enhancement of a particle's light scattering properties, and/or decreases

? show files; ds; save temp; logoff hold  
File 5:Biosis Previews(R) 1969-2005/Aug W3  
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(c) 2005 Elsevier Science B.V.  
File 155:MEDLINE(R) 1951-2005/Aug W3  
(c) format only 2005 Dialog  
File 172:EMBASE Alert 2005/Aug 26  
(c) 2005 Elsevier Science B.V.  
File 188:Health Devices Sourcebook 2004  
ECRI (A nonprofit agency)  
File 198:Health Devices Alerts(R) 1977-2005/Aug W1  
(c) 2005 ECRI-nonprft agncy

Set	Items	Description
S1	20744	(INDEX? OR INDICES ) (3N)REFRACT? OR (REFRACT? OR INDEX? OR INDICES) (3N) (DISTRIBUT? OR CHARACTER?)
S2	2045	S1(5N) (DETERMIN? OR CONFIRM? OR CHECK? OR MONITOR? OR DECIDE? OR IDENTIF? OR MEASURE?)
S3	80	S2(7N) (SAMPLE? OR SPECIMEN?)
S4	1267360	(RAY? OR BEAM OR LIGHT ) (3N)TRAC? OR TRAC? OR RAYTRAC?
S5	1335	ADAPT? (7N)OPTIC?
S6	28312	IMAG? (3N) (ACQUIR? OR INFORMAT?) OR INFORMATION (3N)ACQUIR?
S7	299098	3D OR (THREE OR THIRD OR 3) (3N) (DIMENSION? OR SHAPE? OR MODEL? OR REPRESENTATION? OR IMAG? OR OBJECT??)
S8	12637	DIFFERENTIAL() INTERFERENCE() CONTRAST OR DIC
S9	120729	MICROSCOP? (7N) (FLUORESCEN? OR PHASE)
S10	138	AU=(KAM, Z? OR KAM Z?)
S11	4	S10 AND S1
S12	2	RD (unique items)
S13	7	S1(S)S4(S)S8
S14	3	RD (unique items)
S15	1	S14 NOT PY>1998
S16	0	S15 NOT S12
S17	8	S1(S)S4(S)S9
S18	3	RD (unique items)
S19	2	S18 NOT PY>1998
S20	2	S19 NOT S12
S21	1	S3(S)S4
S22	1	S21 NOT (S20 OR S12)
S23	0	S3(S)S5
S24	1	S3(S)S6
S25	1	S24 NOT (S22 OR S20 OR S12)
S26	1	S3(S)S7
S27	0	S26 NOT (S25 OR S22 OR S20 OR S12)
S28	0	S3(S)S8
S29	4	S3(S)S9
S30	3	S29 NOT (S25 OR S22 OR S20 OR S12)
S31	1	RD (unique items)

12/3,K/1 (Item 1 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.

0013054412 BIOSIS NO.: 200100226251  
**Computational adaptive optics for live three-dimensional biological imaging**  
AUTHOR: Kam Z ; Hanser B; Gustafsson M G L; Agard D A; Sedat J W (Reprint  
AUTHOR ADDRESS: Department of Biochemistry and Biophysics, University of  
California, San Francisco, CA, 94143, USA\*\*USA  
JOURNAL: Proceedings of the National Academy of Sciences of the United  
States of America 98 (7): p3790-3795 March 27, 2001 2001  
MEDIUM: print  
ISSN: 0027-8424  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

AUTHOR: Kam Z ...

...ABSTRACT: microscopy of thick biological samples, such as tissues, is  
often limited by aberrations caused by **refractive index** variations  
within the sample itself. This problem is particularly severe for live  
imaging, a field...

...inherently fluorescent proteins. We describe a method of removing such  
aberrations computationally by mapping the **refractive index** of the  
sample using differential interference contrast microscopy, modeling the  
aberrations by ray tracing through...

DESCRIPTORS:

MISCELLANEOUS TERMS: ... **refractive index** variations

12/3,K/2 (Item 1 from file: 73)  
DIALOG(R)File 73:EMBASE  
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07557932 EMBASE No: 1999024066  
**Microscopic differential interference contrast image processing by line  
integration (LID) and deconvolution**

Kam Z.

Z. Kam, Department of Molecular Cell Biology, Weizmann Institute of  
Science, Rehovot 76100 Israel

AUTHOR EMAIL: lizkam@wiccmail.weizmann.ac.il

Bioimaging ( BIOIMAGING ) (United Kingdom) 1998, 6/4 (166-176)

CODEN: BOIME ISSN: 0966-9051

PUBLISHER ITEM IDENTIFIER: S0966905198978194

DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 28

Kam Z.

...by DIC, namely path integration (line integrated DIC, or LID). LID  
images relate to the **refractive index** of the specimen, and are  
inherently positive in value, thus many powerful algorithms developed for  
...

MEDICAL DESCRIPTORS:

zebra fish; leukocyte; **refraction index** ; algorithm; contrast

enhancement; morphogenesis; cellular distribution; depolarization; nonhuman  
; animal cell; embryo; article; priority journal  
?



20/3,K/1 (Item 1 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0011113912 BIOSIS NO.: 199799747972

**Plasma membrane water permeability of cultured cells and epithelia measured by light microscopy with spatial filtering**

AUTHOR: Farinas Javier (Reprint); Kneen Malea; Moore Megan; Verkman A S  
AUTHOR ADDRESS: Cardiovascular Res. Inst., 1246 Health Sci. East Tower,  
Univ. California San Francisco, San Francisco, CA 94143-0521, USA\*\*USA  
JOURNAL: Journal of General Physiology 110 (3): p283-296 1997 1997  
ISSN: 0022-1295  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

...ABSTRACT: were confirmed by signal measurements of cell layers bathed in solutions of various osmolarities and **refractive indices**. The excellent signal-to-noise ratio of the transmitted light detection permitted measurement of cell...

...0.0024 cm/s (MDCK cells), and 0.0039 and 0.0052 cm/s (human **tracheal** cells) at 23 degree C. In intact toad urinary bladder, basolateral P-f was 0...

20/3,K/2 (Item 2 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0010310063 BIOSIS NO.: 199698777896

**Aberration control in quantitative imaging of botanical specimens by multidimensional fluorescence microscopy**

AUTHOR: White N S (Reprint); Errington R J; Fricker M D; Wood J L  
AUTHOR ADDRESS: Plant Sci. Dep., Oxford Univ., South Parks Road, Oxford OX1 3RB, UK\*\*UK  
JOURNAL: Journal of Microscopy (Oxford) 181 (2): p99-116 1996 1996  
ISSN: 0022-2720  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

...ABSTRACT: distortion, from refractive index boundaries at the sample, can be accurately modelled by a geometric **ray tracing** programme, considering weighted components across the entire objective lens working NA. The modal z-focus...

?

22/3,K/1 (Item 1 from file: 73)  
DIALOG(R) File 73:EMBASE  
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01194718 EMBASE No: 1978326131

**Enhanced discrimination of glass samples by phosphorescence analysis**

Calloway A.R.; Jones P.F.

Analyt. Sci. Dept., Chem. Phys. Lab., Aerospace Corp., El Segundo, Calif.  
United States

Journal of Forensic Sciences ( J. FORENSIC SCI. ) (United States) 1978,  
23/2 (263-273)

CODEN: JFSCA

DOCUMENT TYPE: Journal

LANGUAGE: ENGLISH

**Measurements** were made to establish the **refractive index distribution** of 143 glass **samples**. These data show that there is a 0.068 probability that two randomly selected window...

...distinguished individually but were revealed as two dissimilar pairs. At least four different species (presumably **trace** ions as yet unidentified ) contribute to the phosphorescence. For all samples, the phosphorescence spectrum consists...

?

25/3,K/1 (Item 1 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0014756614 BIOSIS NO.: 200400127371

**Determining the refractive indices of biological specimens from  
multi-photon axial fluorescence profiles.**

AUTHOR: Fwu Peter T (Reprint); Dong Chen-Yuan (Reprint)

AUTHOR ADDRESS: National Taiwan University, Taipei, Taiwan\*\*Taiwan

JOURNAL: Biophysical Journal 86 (1): p320a January 2004 2004

MEDIUM: print

CONFERENCE/MEETING: 48th Annual Meeting of the Biophysical Society  
Baltimore, MD, USA February 14-18, 2004; 20040214

SPONSOR: Biophysical Society

ISSN: 0006-3495 (ISSN print)

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: will determine the sensitivity of this approach and discuss  
how it can be applied in **determining the indices of refraction** of  
biological **specimens** . Our results can have important consequences in  
optimizing three dimensional bio-imaging methodologies.

?

31/3,K/1 (Item 1 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0006817552 BIOSIS NO.: 198988132667

**LECTIN HISTOCHEMISTRY OF ADENOMATOUS POLYPS NOT A PREDICTOR OF METACHRONOUS LESIONS**

AUTHOR: MCGARRITY T J (Reprint); PEIFFER L P; ABT A B

AUTHOR ADDRESS: DIV GASTROENTEROL, DEP MED, MILTON S HERSHEY MED CENT,  
HERSHEY, PA 17033, USA\*\*USA

JOURNAL: Cancer 64 (8): p1708-1713 1989

ISSN: 0008-543X

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: ENGLISH

...ABSTRACT: DBA staining was noted in 72% of polyps without regional preference. GSA1 stained all polyp **specimens** . To **determine** if the lectin binding **characteristics** of an **index** (initial) polyp might serve as a predictor of metachronous lesions, 20 patients (29 polyps) without...

?